

MATHEMATICS PRIMARY FOUR SECOND TERM

2025 / 2026

GEEL 2000 LANGUAGE
SCHOOL

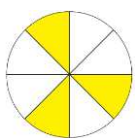
Name:.....

Class:.....

Unit 9

Fractions

Lesson 1 to 3



$$\frac{3}{8}$$

Numerator (number of shaded parts)

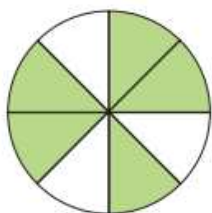
Denominator (number of all parts)

The figure	No. of equal parts	No. of shaded parts	Fraction form	Word form
	2	1	$\frac{1}{2}$	One Half
	3	1	$\frac{1}{3}$	One Third
	4	1	$\frac{1}{4}$	One Fourth
	5	1	$\frac{1}{5}$	One Fifth
	6	1	$\frac{1}{6}$	One Sixth
	7	1	$\frac{1}{7}$	One Seventh
	8	1	$\frac{1}{8}$	One eighth

Complete the following table:

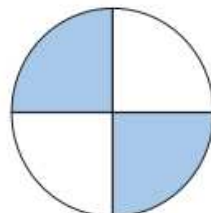
	Numerator	Denominator	The Fraction	Word form
1	1	2	$\frac{\dots}{\dots}$	
2	2		$\frac{\dots}{7}$	
3		3	$\frac{2}{\dots}$	
4			$\frac{5}{8}$	
5			$\frac{\dots}{\dots}$	Seven ninths

Write the fraction that represents the shaded part:



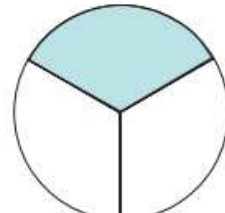
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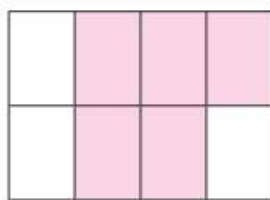
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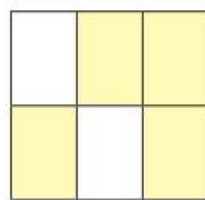
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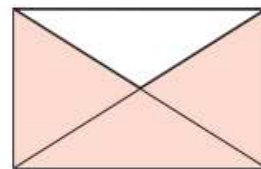
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Complete:

$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \frac{\dots}{\dots}$$

$$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \frac{\dots}{\dots}$$

$$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \frac{\dots}{\dots}$$

$$\frac{1}{4} + \frac{1}{4} = \frac{\dots}{\dots}$$

Decompose the following fractions:

$$\frac{4}{5} = \frac{\dots}{\dots} + \frac{\dots}{\dots} + \frac{\dots}{\dots} + \frac{\dots}{\dots}$$

$$\frac{3}{8} = \frac{\dots}{\dots}$$

$$\frac{2}{6} = \frac{\dots}{\dots}$$

Decompose the following fractions in two different ways:

$$1 \quad \frac{3}{4} = \frac{\dots}{\dots} + \frac{\dots}{\dots} + \frac{\dots}{\dots}$$

$$2 \quad \frac{3}{4} = \frac{\dots}{\dots} + \frac{\dots}{\dots}$$

$$1 \quad \frac{4}{5} = \frac{\dots}{\dots} + \frac{\dots}{\dots} + \frac{\dots}{\dots}$$

$$2 \quad \frac{4}{5} = \frac{\dots}{\dots} + \frac{\dots}{\dots}$$

Lesson 4

Proper fraction:

Is just a fraction where its numerator is **less than** its denominator, such as: $\frac{1}{5}$, $\frac{2}{3}$, $\frac{5}{7}$, $\frac{10}{21}$, ... etc.

Improper fraction:

Is just a fraction where its numerator is **more than** or **equal to** its denominator, such as: $\frac{7}{5}$, $\frac{5}{3}$, $\frac{7}{7}$, $\frac{11}{2}$, ... etc.

Mixed number:

Is a number consisting of a whole number and a proper fraction, such as: $3\frac{1}{5}$, $4\frac{2}{3}$, $2\frac{5}{7}$, $6\frac{11}{12}$, ... etc.

Match:

$\frac{5}{5}$ •

• **proper fraction** •

$\frac{9}{7}$ •

$3\frac{5}{8}$ •

• **improper fraction** •

$\frac{3}{13}$ •

$\frac{5}{7}$ •

• **mixed number** •

$2\frac{5}{7}$ •

Complete:

① $2 = \frac{\dots}{5} = \frac{4}{\dots} = \dots$

④ $4 = \frac{\dots}{2} = \frac{20}{\dots} = \dots$

⑦ $8 = \frac{\dots}{2} = \frac{40}{\dots} = \dots$

② $1 = \frac{\dots}{5} = \frac{4}{\dots} = \dots$

⑤ $5 = \frac{\dots}{5} = \frac{15}{\dots} = \dots$

⑧ $9 = \frac{\dots}{3} = \frac{36}{\dots} = \dots$

③ $3 = \frac{\dots}{5} = \frac{12}{\dots} = \dots$

⑥ $6 = \frac{\dots}{3} = \frac{24}{\dots} = \dots$

⑨ $7 = \frac{\dots}{5} = \frac{21}{\dots} = \dots$

Write each of the following as an improper fraction:

① $3\frac{1}{2} = \frac{\dots}{\dots}$

④ $5\frac{1}{2} = \frac{\dots}{\dots}$

⑦ $5\frac{1}{4} = \frac{\dots}{\dots}$

② $3\frac{2}{3} = \frac{\dots}{\dots}$

⑤ $2\frac{3}{5} = \frac{\dots}{\dots}$

⑧ $6\frac{2}{3} = \frac{\dots}{\dots}$

③ $2\frac{3}{4} = \frac{\dots}{\dots}$

⑥ $8\frac{1}{2} = \frac{\dots}{\dots}$

⑨ $4\frac{3}{10} = \frac{\dots}{\dots}$

Write each of the following as a mixed number:

① $\frac{5}{2} = \dots \frac{\dots}{\dots}$

④ $\frac{9}{2} = \dots \frac{\dots}{\dots}$

⑦ $\frac{15}{4} = \dots \frac{\dots}{\dots}$

② $\frac{7}{3} = \dots \frac{\dots}{\dots}$

⑤ $\frac{13}{5} = \dots \frac{\dots}{\dots}$

⑧ $\frac{22}{3} = \dots \frac{\dots}{\dots}$

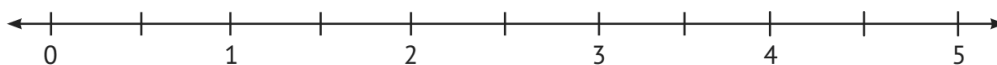
③ $\frac{9}{4} = \dots \frac{\dots}{\dots}$

⑥ $\frac{17}{2} = \dots \frac{\dots}{\dots}$

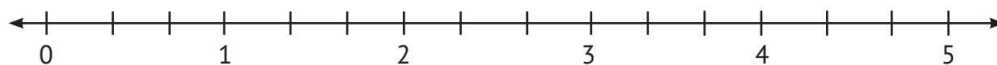
⑨ $\frac{31}{10} = \dots \frac{\dots}{\dots}$

Put each fraction in its suitable place on the number line:

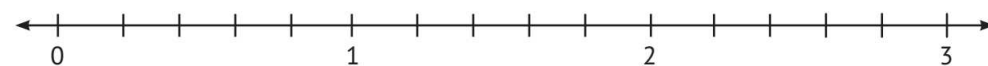
a) $4\frac{1}{2}$, $1\frac{1}{2}$, $\frac{8}{2}$, $3\frac{1}{2}$, $2\frac{1}{2}$



b) $4\frac{1}{3}$, $1\frac{2}{3}$, $2\frac{2}{3}$, $3\frac{1}{3}$, $\frac{2}{3}$



c) $\frac{15}{5}$, $1\frac{3}{5}$, $2\frac{4}{5}$, $1\frac{1}{5}$, $\frac{3}{5}$



Lesson 5 to 7

Add:

a) $1\frac{1}{5} + 2\frac{2}{5} =$

b) $4\frac{3}{7} + 5\frac{4}{7} =$

c) $6\frac{3}{8} + 2\frac{5}{8} =$

d) $6\frac{3}{4} + 8\frac{3}{4} =$

e) $3\frac{5}{8} + 2\frac{7}{8} =$

Subtract:

a) $5 - 2\frac{1}{7} =$

b) $4\frac{3}{8} - 3\frac{1}{8} =$

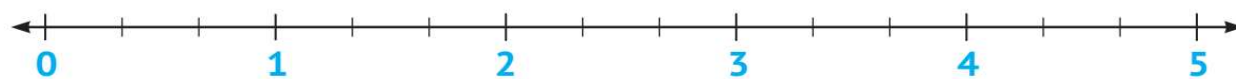
c) $6\frac{3}{7} - 1\frac{2}{7} =$

d) $9\frac{3}{5} - 2\frac{4}{5} =$

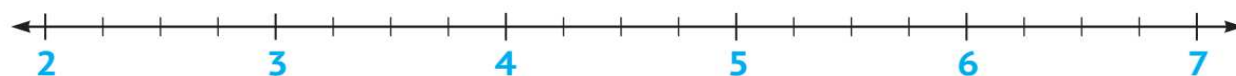
e) $8\frac{2}{9} - 3\frac{5}{9} =$

Add using the number line:

a) $2\frac{1}{3} + 1\frac{1}{3} = \dots\dots\dots$



b) $3\frac{3}{4} + \frac{3}{4} = \dots\dots\dots$



c) $1\frac{2}{5} + 1\frac{4}{5} = \dots\dots\dots$



Add:

$2\frac{3}{4} + 5 = \dots\dots\dots$

$4\frac{3}{5} + 2\frac{1}{5} = \dots\dots\dots$

$2\frac{3}{8} + 1\frac{4}{8} = \dots\dots\dots$

$4\frac{4}{5} + 3\frac{1}{5} = \dots\dots\dots$

$2\frac{6}{7} + \frac{1}{7} = \dots\dots\dots$

$3\frac{5}{8} + 2\frac{3}{8} = \dots\dots\dots$

$3\frac{5}{6} + \frac{3}{6} = \dots\dots\dots$

$4\frac{3}{7} + 2\frac{6}{7} = \dots\dots\dots$

$3\frac{5}{6} + 2\frac{5}{6} = \dots\dots\dots$

Subtract:

a) $5 \frac{6}{7} - 2 \frac{3}{7} = \dots\dots\dots$

b) $9 - 1 \frac{3}{7} = \dots\dots\dots$

c) $5 \frac{1}{4} - 2 \frac{3}{4} = \dots\dots\dots$

d) $9 \frac{1}{5} - 2 = \dots\dots\dots$

e) $4 \frac{3}{4} - 1 \frac{2}{4} = \dots\dots\dots$

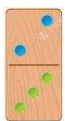
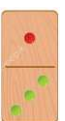
f) $8 - 5 \frac{3}{8} = \dots\dots\dots$

g) $6 \frac{3}{8} - 1 \frac{5}{8} = \dots\dots\dots$

h) $6 \frac{5}{8} - 3 = \dots\dots\dots$

Lesson 8

[1] Put the suitable relation (<), (>) or (=) in the blanks:

1.  

2.  

3.  

4.  

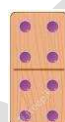
[2] Put the suitable relation (<), (>) or (=) in the blanks:

1.  

2.  

3.  

4.  

5.  

6.  

[3] Put the suitable relation (<), (>) or (=) in the blanks:

(1) $\frac{1}{5}$ $\frac{4}{5}$

(5) $\frac{3}{4}$ $\frac{1}{4}$

(2) $\frac{9}{10}$ $\frac{3}{10}$

(6) $\frac{5}{9}$ $\frac{4}{9}$

(3) $2\frac{7}{9}$ $2\frac{5}{9}$

(7) $2\frac{1}{8}$ $\frac{17}{8}$

(4) $3\frac{2}{5}$ $\frac{7}{5}$

(8) $\frac{3}{7}$ $\frac{4}{7}$

[4] Put the suitable relation (<), (>) or (=) in the blanks:

(1) $\frac{3}{4}$ $\frac{3}{5}$

(4) $\frac{1}{7}$ $\frac{1}{3}$

(2) $\frac{2}{8}$ $\frac{2}{4}$

(5) $\frac{8}{25}$ $\frac{8}{13}$

(3) $2\frac{7}{9}$ $2\frac{7}{8}$

(6) $2\frac{1}{2}$ $2\frac{1}{9}$

[5] Arrange each of the following numbers:

(1) $\frac{2}{11}$, $\frac{7}{11}$, $\frac{4}{11}$, $\frac{10}{11}$

Ascending order:

(2) $\frac{13}{7}$, $\frac{5}{7}$, $\frac{9}{7}$, $\frac{4}{7}$, $\frac{11}{7}$

Descending order:

(3) $\frac{2}{10}$, $\frac{9}{10}$, $\frac{14}{10}$, 0.5, $\frac{7}{10}$

Ascending order:

(4) $\frac{5}{9}$, 1, $\frac{2}{9}$, $\frac{7}{9}$

Descending order:

[6] Arrange each of the following numbers:

(1) $\frac{7}{13}$, $\frac{7}{5}$, $\frac{7}{9}$, $\frac{7}{4}$, $\frac{7}{11}$

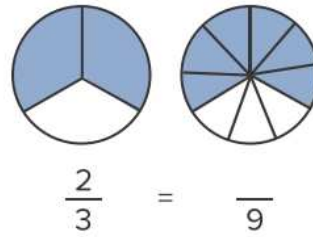
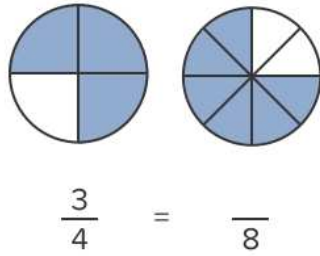
Ascending order:

(2) $\frac{12}{5}$, $\frac{12}{7}$, $\frac{12}{17}$, $\frac{12}{13}$, $\frac{12}{15}$

Descending order:

Lesson 9 to 11

Record the equivalent fraction in the second model.



Tell whether the fractions are equivalent. Write = or $\neq$.

3. $\frac{1}{6} \bigcirc \frac{2}{12}$

4. $\frac{2}{5} \bigcirc \frac{6}{10}$

5. $\frac{4}{12} \bigcirc \frac{1}{3}$

6. $\frac{5}{8} \bigcirc \frac{2}{4}$

7. $\frac{5}{6} \bigcirc \frac{10}{12}$

8. $\frac{1}{2} \bigcirc \frac{5}{10}$

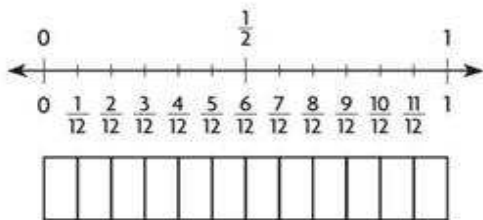
Benchmarks A **benchmark** is a known size or amount that helps you understand a different size or amount. You can use $\frac{1}{2}$ as a benchmark to help you compare fractions.

Example Use benchmarks to compare fractions.

A family hiked the same mountain trail. Evie and her father hiked $\frac{5}{12}$ of the trail before they stopped for lunch. Jill and her mother hiked $\frac{9}{10}$ of the trail before they stopped for lunch. Who hiked farther before lunch?

Compare $\frac{5}{12}$ and $\frac{9}{10}$ to the benchmark $\frac{1}{2}$.

STEP 1 Compare $\frac{5}{12}$ to $\frac{1}{2}$.



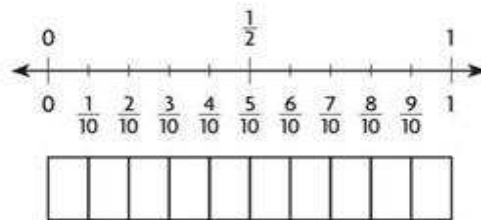
Think: Shade $\frac{5}{12}$.

$$\frac{5}{12} \bigcirc \frac{1}{2}$$

Since $\frac{5}{12}$ is _____ than $\frac{1}{2}$ and $\frac{9}{10}$ is _____ than $\frac{1}{2}$, you know that $\frac{5}{12} \bigcirc \frac{9}{10}$.

So, _____ hiked farther before lunch.

STEP 2 Compare $\frac{9}{10}$ to $\frac{1}{2}$.



Think: Shade $\frac{9}{10}$.

$$\frac{9}{10} \bigcirc \frac{1}{2}$$

lesson 12 to 15

Example: Write two fractions equivalent to $\frac{4}{6}$.

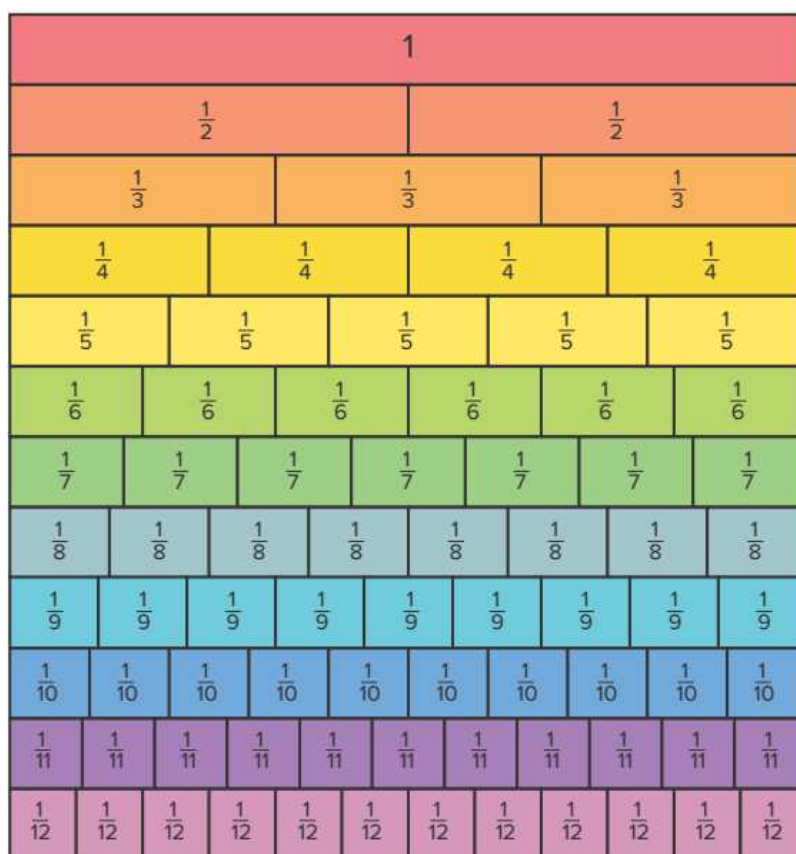
$$\frac{4}{6} = \frac{2}{3}$$

The diagram shows a circular arrow from 4 to 2 labeled $\div 2$ and another circular arrow from 6 to 3 labeled $\div 2$.

$$\frac{4}{6} = \frac{12}{18}$$

The diagram shows a circular arrow from 4 to 12 labeled $\times 3$ and another circular arrow from 6 to 18 labeled $\times 3$.

From Parts to a Whole Use the fraction wall to answer the questions.



1. How many halves are in 1 whole? Using halves, how would you write 1 whole as a fraction?
2. How many fourths are in 1 whole? Using fourths, how would you write 1 whole as a fraction?
3. How many tenths are in 1 whole? Using tenths, how would you write 1 whole as a fraction?

Complete:

a $\frac{1}{2} = \frac{5}{\dots\dots}$

c $\frac{3}{5} = \frac{9}{\dots\dots}$

e $\frac{16}{18} = \frac{\dots\dots}{9}$

g $\frac{\dots\dots}{13} = \frac{4}{26}$

b $\frac{5}{15} = \frac{\dots\dots}{3}$

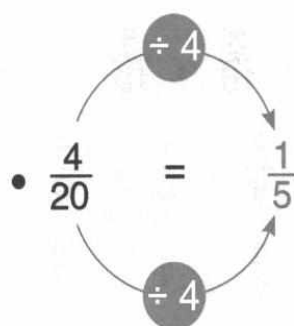
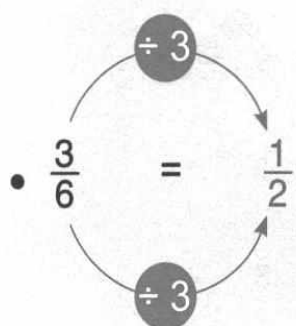
d $\frac{8}{9} = \frac{48}{\dots\dots}$

f $\frac{5}{7} = \frac{30}{\dots\dots}$

h $\frac{\dots\dots}{9} = \frac{32}{72}$

Simplify as the example:

Example :



a $\frac{5}{10} = \frac{\dots\dots}{\dots\dots}$

b $\frac{2}{6} = \frac{\dots\dots}{\dots\dots}$

c $\frac{6}{12} = \frac{\dots\dots}{\dots\dots}$

d $\frac{6}{9} = \frac{\dots\dots}{\dots\dots}$

e $\frac{5}{20} = \frac{\dots\dots}{\dots\dots}$

f $\frac{6}{21} = \frac{\dots\dots}{\dots\dots}$

Multiplying to Create Equivalent Fractions Follow your teacher's directions to solve the problems.

1. How many ways can you show 1 (one whole) as a fraction? Write as many as you can in the time allowed.

Generate at least 5 equivalent fractions for each fraction.

2. $\frac{2}{3}$; _____; _____; _____; _____; _____

3. _____; $\frac{2}{4}$; _____; _____; _____; _____

4. $\frac{3}{5}$; _____; _____; _____; _____; _____

5. _____; _____; $\frac{3}{9}$; _____; _____; _____

Dividing to Create Equivalent Fractions Follow your teacher's directions to solve the problems.

1. $\frac{15}{20}$ is equivalent to $\frac{3}{4}$. How can you use division to prove it?

Determine whether each fraction pair is equivalent. If it is, write "true." If it is not, write "false."

2. $\frac{2}{3} = \frac{6}{9}$ _____

3. $\frac{7}{8} = \frac{2}{3}$ _____

4. $\frac{3}{5} = \frac{6}{8}$ _____

5. $\frac{6}{10} = \frac{2}{5}$ _____

6. $\frac{2}{8} = \frac{1}{4}$ _____

7. $\frac{9}{12} = \frac{2}{4}$ _____

8. $\frac{3}{8} = \frac{1}{6}$ _____

9. $\frac{1}{3} = \frac{4}{12}$ _____

What Is the Missing Multiple? Work with a partner to identify the missing numerator or denominator for the equivalent fractions.

1. $\frac{3}{4} = \frac{\square}{12}$

2. $\frac{5}{15} = \frac{15}{\square}$

3. $\frac{20}{25} = \frac{\square}{5}$

Find the missing numerator or denominator to make the fractions equivalent. Record what factor you multiplied or divided by. An example is shown.

$$\frac{2}{5} = \frac{\quad}{20}$$

4. $\frac{5}{7} = \frac{\square}{21}$

5. $\frac{2}{9} = \frac{10}{\square}$

Heba is making pancake batter. The recipe calls for $\frac{5}{8}$ of a jug of milk, and she only has $\frac{2}{8}$ of a jug of milk. How much more milk does Heba need to make the pancake batter?

What do I know? _____

Kareem runs to train for the big race. On Monday he runs $\frac{4}{2}$ kilometer, on Wednesday he runs $\frac{1}{2}$ kilometer, and on Friday he runs $\frac{6}{2}$ kilometer. How many kilometers did Kareem run in all?

What do I know? _____

Complete to get equivalent fractions:

$\frac{5}{8} = \frac{\dots}{\dots}$	$\frac{3}{18} = \frac{\dots}{\dots}$	$\frac{1}{9} = \frac{\dots}{\dots}$	$\frac{2}{6} = \frac{\dots}{\dots}$
$\frac{14}{35} = \frac{\dots}{\dots}$	$\frac{10}{15} = \frac{\dots}{\dots}$	$\frac{7}{9} = \frac{\dots}{\dots}$	$\frac{16}{32} = \frac{\dots}{\dots}$
$\frac{20}{30} = \frac{\dots}{\dots}$	$\frac{33}{44} = \frac{\dots}{\dots}$	$\frac{6}{12} = \frac{\dots}{\dots}$	$\frac{24}{40} = \frac{\dots}{\dots}$
$\frac{20}{45} = \frac{4}{\dots}$	$\frac{2}{7} = \frac{\dots}{35}$	$\frac{3}{8} = \frac{24}{\dots}$	$\frac{12}{24} = \frac{2}{\dots}$
$\frac{4}{9} = \frac{\dots}{18}$	$\frac{21}{35} = \frac{\dots}{5}$	$\frac{16}{20} = \frac{\dots}{10}$	$\frac{3}{4} = \frac{\dots}{32}$

Complete each of following

$$\frac{1}{3} \times 7 = \dots\dots\dots$$

$$4 \times \frac{1}{9} = \dots\dots\dots$$

$$\frac{1}{3} \times 3 = \dots\dots\dots$$

Unit (9) Assessment

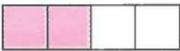
[1] Choose the correct answer:

- $\frac{3}{8} =$ _____
 A. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ B. $\frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ C. $\frac{2}{8} + 1$ D. $\frac{1}{8} + 2$
- $\frac{14}{3} =$ _____ as a mixed number.
 A. $4\frac{1}{3}$ B. $3\frac{2}{4}$ C. $4\frac{2}{3}$ D. $2\frac{2}{3}$
- $\frac{3}{8} >$ _____
 A. $\frac{3}{4}$ B. $\frac{5}{8}$ C. $1\frac{1}{8}$ D. $\frac{1}{8}$
- Which of the following is the least ?
 A. $\frac{4}{9}$ B. $\frac{7}{9}$ C. $\frac{2}{9}$ D. 1
- $2\frac{3}{7} =$ _____ "as an improper fraction."
 A. $\frac{17}{3}$ B. $\frac{17}{7}$ C. $\frac{14}{7}$ D. $\frac{11}{7}$
- $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$ _____
 A. $\frac{4}{5}$ B. $\frac{111}{5}$ C. $3 \times \frac{1}{5}$ D. $\frac{3}{15}$
- $\frac{7}{8} =$ _____
 A. $\frac{21}{11}$ B. $\frac{14}{16}$ C. $1\frac{7}{4}$ D. $\frac{14}{24}$

[2] Complete:

- $7\frac{3}{9} -$ _____ $= 4\frac{1}{9}$
- $\frac{5}{8} = \frac{\quad}{40}$
- $\text{_____} - 2\frac{1}{5} = 3\frac{3}{5}$
- $5\frac{1}{6} + 1\frac{4}{6} =$ _____
- $2 + \frac{1}{7} + 3 + \frac{3}{7} =$ _____
- $2 - \frac{2}{9} =$ _____
- $5 \times \frac{1}{4} = \frac{3}{4} +$ _____
- $6\frac{1}{7} - 2\frac{3}{7} =$ _____

[3] Choose the correct answer:

- $\frac{5}{7} > \underline{\hspace{2cm}}$
 A. $\frac{7}{7}$ B. $\frac{6}{7}$ C. $\frac{1}{7}$ D. 1
- Which fraction is equivalent to $\frac{4}{12}$?
 A. $\frac{8}{20}$ B. $\frac{2}{9}$ C. $\frac{1}{4}$ D. $\frac{3}{9}$
- Sameh has 20 cakes. If $\frac{3}{5}$ of them are covered with chocolate, then the number of chocolate cakes = $\underline{\hspace{2cm}}$ cakes.
 A. 10 B. 13 C. 12 D. 17
- The bar model that represents the fraction of the colored parts of the multiplication sentence $2 \times \frac{1}{5}$ is $\underline{\hspace{2cm}}$
 A.  B.  C.  D. 
- $\frac{2}{3} = \frac{\underline{\hspace{1cm}}}{9}$
 A. 1 B. 4 C. 6 D. 8
- $\frac{3}{8} < \underline{\hspace{2cm}}$
 A. $\frac{3}{10}$ B. $\frac{3}{9}$ C. $\frac{3}{12}$ D. $\frac{3}{7}$

[4] Answer the following:

- Sara is making pancake batter. The recipe calls for $\frac{7}{10}$ of a jug of milk, and she only has $\frac{2}{10}$ of a jug of milk. How much more milk does Sara need to make the pancake batter?

- Arrange the following fractions from the greatest to the least.
 $\frac{7}{9}, \frac{4}{9}, \frac{9}{9}, \frac{1}{9}, \frac{5}{9}$

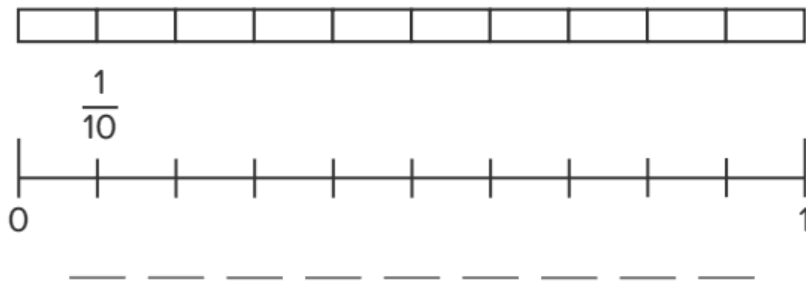
- Use the benchmark fractions 0, $\frac{1}{2}$ and 1 to order the following fractions from least to greatest.
 $\frac{3}{8}, \frac{7}{9}, \frac{5}{10}$

- Joy used $3\frac{4}{6}$ kg of meat. Amal used $2\frac{2}{6}$ kg of meat. What is the total amount of meat did they use altogether?

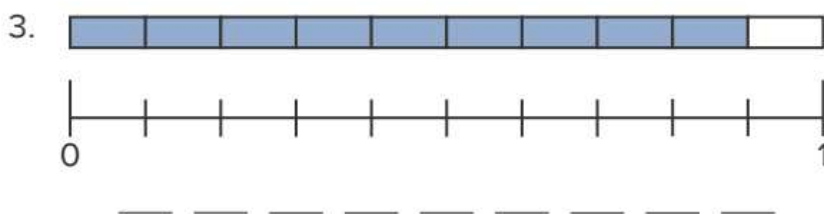
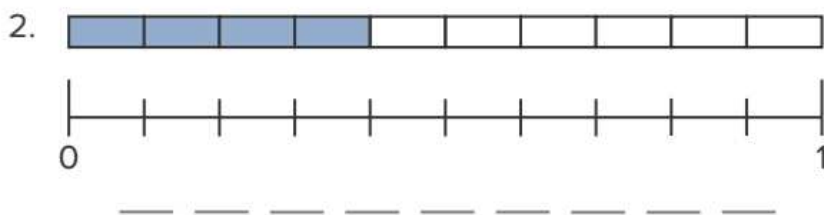
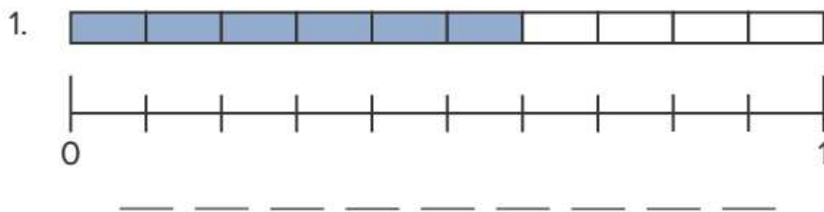
Unit 10 [Decimals]

Lesson 1,2

Break It Apart Follow along with your teacher to fill in the fractions and decimals on the number line.

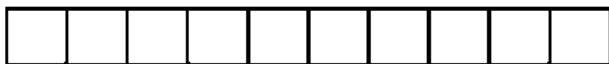


Connect the Parts Record what fraction and decimal are shown.

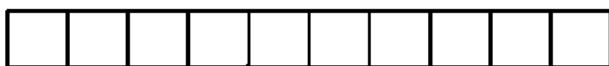


Shade in the model to represent the decimal.

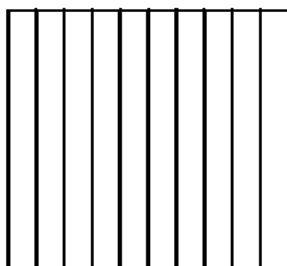
4. 0.7



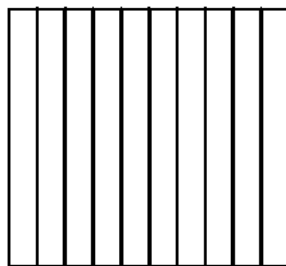
5. 0.5



6. 0.6



7. 0.2



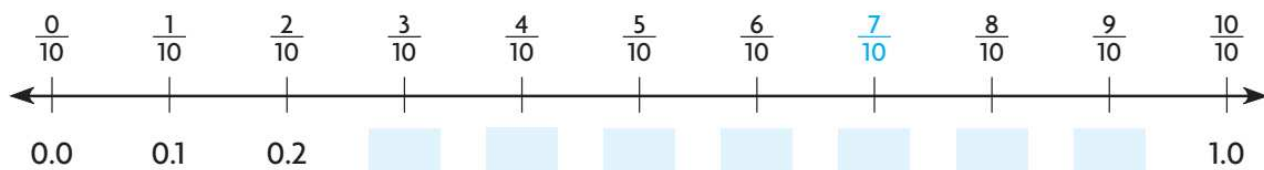
Hosam had a 1-meter piece of fabric. Of this piece, 0.2 meter had flowers on it, 0.6 meter was plain blue, and the rest had stars. Color in the strip of Hosam's fabric based on the description.



What decimal of Hosam's strip had stars? _____

Use a number line.

Label the number line with decimals that are equivalent to the fractions. Locate the point $\frac{7}{10}$.



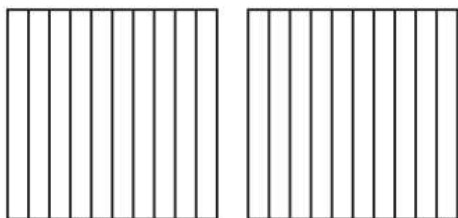
_____ names the same amount as $\frac{7}{10}$.

Lesson 3,4

Use a model and a place-value chart.

Fraction

Shade $1\frac{6}{10}$ of the model.



Write: _____

Read: one and six tenths

Decimal

$1\frac{6}{10}$ is 1 whole and 6 tenths.

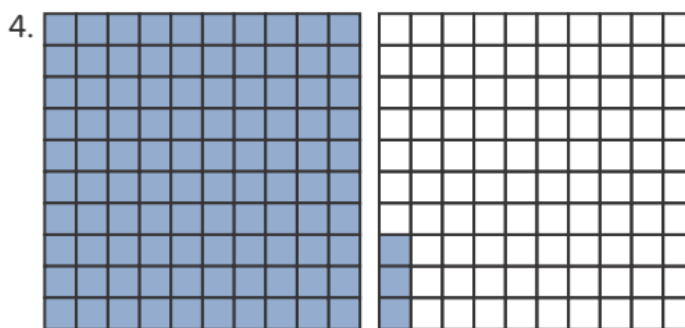
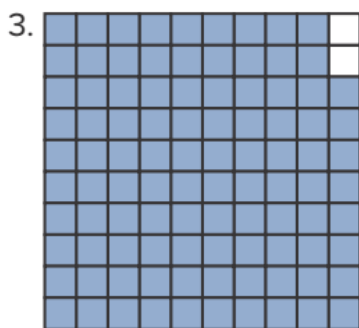
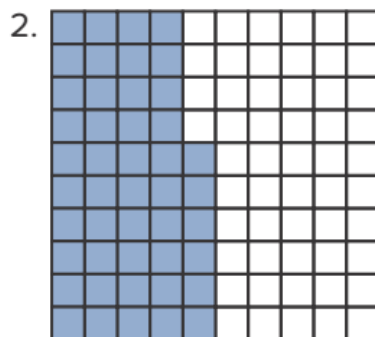
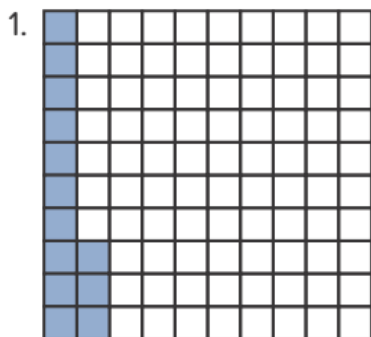
Think: Use the ones place to record wholes.

Ones	.	Tenths	Hundredths
	.		

Write: _____

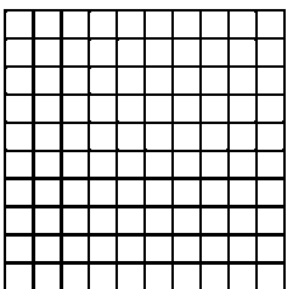
Read: _____

More Cups of Rice Record what decimal is shown.

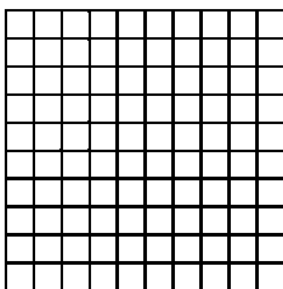


Shade in the grids to show the decimal stated.

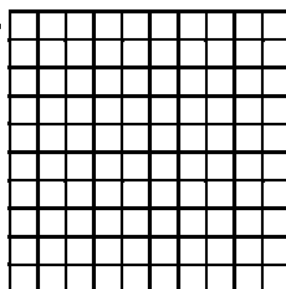
5. 0.46



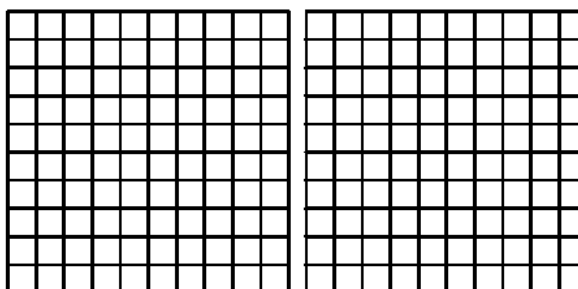
6. 0.72



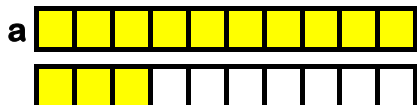
7. 0.06



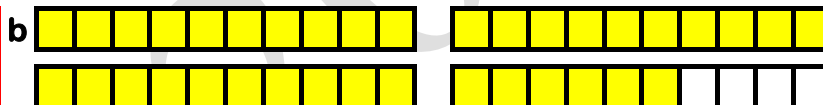
8. 1.28



Circle the decimal that represent the shaded part:



13.0 0.7 1.3



4 3.6 36

Writing About Math Use the number to answer the questions: **532.89**

1. What is the value of the 3? _____
2. What digit is in the Hundredths place? _____
3. What is the value of the digit in the Hundreds place? _____
4. What digit is in the Tenths place? _____

Practice: Copy and Solve Write the fraction or mixed number as a decimal.

8. $\frac{9}{100}$

9. $4\frac{55}{100}$

10. $\frac{10}{100}$

11. $9\frac{33}{100}$

12. $\frac{92}{100}$

Use the example in the chart to help you answer the following problems.

Standard Form	Word Form	Unit Form	Expanded Form
4.23	four and twenty-three hundredths	4 Ones, 2 Tenths, 3 Hundredths	$4 + 0.2 + 0.03$

Write the numbers in word form.

1. 4.53

2. 0.48

3. $2 + 0.1 + 0.03$

Write the numbers in unit form.

4. 4.52

5. seven and thirty-four hundredths

6. sixty-nine hundredths

Write the numbers in expanded form.

7. 2.04

8. two and fifty-Hundredths

9. 5 Ones, 6 Tenths, 8 Hundredths

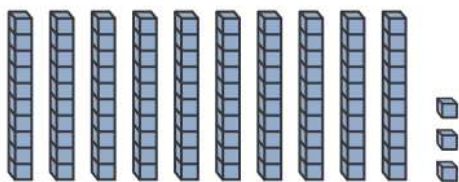
Write the numbers in standard form.

10. 7 Ones, 9 Hundredths

11. $5 + 0.5 + 0.01$

12. nine and forty-three Hundredths

13.



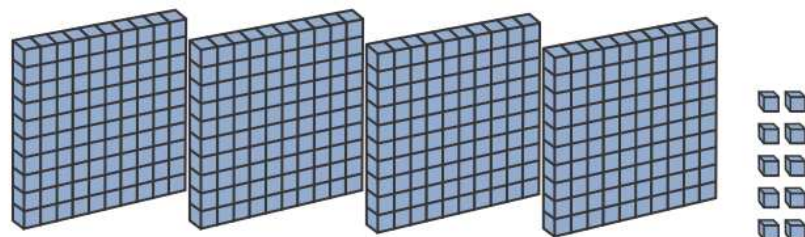
Standard form: _____

Word form: _____

Unit form: _____

Expanded form: _____

14.



Standard form: _____

Word form: _____

Unit form: _____

Expanded form: _____

Lesson 5,6



Mixed Number : $2\frac{6}{10}$

Decimal : 2.6

Word form : Two and six tenths.

Write the fraction form for each of the following decimals:

a. 0.9 =	b. 2.7 =	c. 3.74 =
d. 7.05 =	e. 7.6 =	f. 3.4 =
g. 10.05 =	h. 2.02 =	i. 2.20 =
j. 5.97 =	k. 4.79 =	l. 6.28 =
m. 3.27 =	n. 5.17 =	o. 3.07 =

Complete:

- | | |
|--------------------------------------|---|
| a. 3.7 = _____ tenths. | b. 5.2 = _____ hundredths. |
| c. 198 tenths = _____ [as a decimal] | d. 291 hundredths = _____ [as a fraction] |
| e. 3.74 = _____ hundredths. | f. 89.5 = _____ tenths. |
| g. 39 tenths = _____ [as a decimal] | h. 2.14 = _____ [hundredths] |

Decompose the units to represent each number as **Tenths** and then write the number as a fraction:

a. 3

Tenths : _____

In fraction form : _____

b. 1

Tenths : _____

In fraction form : _____

c. 4

Tenths : _____

In fraction form : _____

d. 1.3

Tenths : _____

In fraction form : _____

e. 1.5

Tenths : _____

In fraction form : _____

f. 2.3

Tenths : _____

In fraction form : _____

g. 5.1

Tenths : _____

In fraction form : _____

h. 17.4

Tenths : _____

In fraction form : _____

Decompose the units to represent each number as **Hundredth** and then write the number as a fraction:

a. 1

Hundredths : _____

In fraction form : _____

b. 3

Hundredths : _____

In fraction form : _____

c. 5

Hundredths : _____

In fraction form : _____

d. 19

Hundredths : _____

In fraction form : _____

Lesson 7

Circle the equations that show the equivalency:

1. $\frac{1}{2} = \frac{3}{6}$

2. $\frac{2}{3} = \frac{2}{6}$

3. $\frac{8}{10} = \frac{4}{10}$

4. $\frac{8}{12} = \frac{4}{6}$

5. $\frac{2}{3} = \frac{6}{9}$

6. $\frac{4}{8} = \frac{0}{4}$

7. $\frac{1}{4} = \frac{5}{8}$

8. $\frac{2}{10} = \frac{4}{20}$

9. $\frac{5}{10} = \frac{1}{2}$

Are the two decimals equivalent ? Write equivalent or not equivalent.

a. 0.7 and 0.70 _____

b. 0.04 and 0.4 _____

c. 0.9 and 0.09 _____

d. 0.28 and 0.82 _____

e. 0.17 and 0.07 _____

f. 0.1 and 0.10 _____

Are the two fractions equivalent ? Write equivalent or not equivalent.

a. $\frac{3}{10}$ and $\frac{30}{100}$ _____b. $\frac{5}{100}$ and $\frac{50}{10}$ _____c. $\frac{80}{100}$ and $\frac{8}{10}$ _____d. $\frac{4}{100}$ and $\frac{4}{10}$ _____

Write an equivalent fraction for each.

a. $\frac{7}{10}$ _____b. $\frac{80}{100}$ _____c. $\frac{9}{10}$ _____d. $\frac{4}{10}$ _____

Fill the missing denominator or numerator.

Circle the fraction that is more than 1 whole.

a. $\frac{5}{10} = \frac{50}{\square}$

b. $\frac{20}{100} = \frac{\square}{10}$

c. $\frac{4}{10} = \frac{40}{\square}$

d. $\frac{200}{100} = \frac{\square}{10}$

e. $\frac{70}{\square} = \frac{7}{10}$

f. $\frac{80}{10} = \frac{\square}{100}$

g. $\frac{3}{10} = \frac{\square}{100}$

h. $\frac{60}{100} = \frac{\square}{10}$

i. $\frac{7}{10} = \frac{\square}{100}$

Convert Fractions to Decimals and Decimals to Fractions:

1. $\frac{2}{10} =$ _____

2. $0.5 =$ _____

3. $\frac{45}{100} =$ _____

4. $0.45 =$ _____

5. $\frac{6}{10} =$ _____

6. $\frac{99}{100} =$ _____

7. $0.03 =$ _____

8. $\frac{78}{100} =$ _____

9. $2.3 =$ _____

10. $0.90 =$ _____

11. $\frac{3}{10} =$ _____

12. $0.6 =$ _____

13. $0.1 =$ _____

14. $0.11 =$ _____

15. $\frac{90}{100} =$ _____

16. $\frac{33}{100} =$ _____

17. $1.7 =$ _____

18. $\frac{47}{100} =$ _____

19. $0.40 =$ _____

20. $\frac{1}{100} =$ _____

Lesson 8,9

Using the place value chart, Put (<), (>) or (=):

1. 0.34 _____ 0.4

Ones	Decimal	Tenths	Hundredths
0	.	3	4
0	.	4	

2. 0.45 _____ 0.04

Ones	Decimal	Tenths	Hundredths
	.		
	.		

3. 0.23 _____ 0.3

Ones	Decimal	Tenths	Hundredths
	.		
	.		

4. 0.54 _____ 0.45

Ones	Decimal	Tenths	Hundredths
	.		
	.		

5. 0.62 _____ 0.26

Ones	Decimal	Tenths	Hundredths
	.		
	.		

Compare Using (<), (>) or (=):

a. $0.2 \bigcirc 0.13$

b. $0.31 \bigcirc 0.13$

c. $0.34 \bigcirc 0.04$

d. $0.30 \bigcirc 0.3$

e. $0.35 \bigcirc 0.3$

f. $0.7 \bigcirc 0.68$

g. $0.18 \bigcirc 0.4$

h. $0.60 \bigcirc 0.8$

i. $0.07 \bigcirc 0.7$

Compare Using (<), (>) or (=):

1. $\frac{24}{100} \text{ — } 0.6$

2. $\frac{6}{10} \text{ — } .34$

3. $1.04 \text{ — } 98 \text{ Tenths}$

4. $\frac{134}{100} \text{ — } 1.03$

5. $\frac{9}{10} \text{ — } 0.89$

6. $7 \text{ Tenths — } 0.7$

7. $2.07 \text{ — } 2 \text{ Ones and } 7 \text{ Tenths}$

8. $\frac{50}{100} \text{ — } 5.00$

9. $0.23 \text{ — } \frac{23}{10}$

10. $0.42 \text{ — } \frac{4}{10}$

Compare Using (<), (>) or (=):

a. $\frac{24}{100} \bigcirc 0.6$

b. $3.72 \bigcirc 3\frac{7}{100}$

c. $\frac{6}{10} \bigcirc 0.34$

d. $\frac{134}{100} \bigcirc 1.03$

e. $\frac{200}{100} \bigcirc 0.20$

f. $1.04 \bigcirc 98 \text{ tenths}$

g. $3 \text{ hundredths } \bigcirc 2 \text{ tenths}$

h. $0.23 \bigcirc \frac{23}{10}$

i. $\frac{8}{10} \bigcirc 0.79$

j. $7 \text{ tenths } \bigcirc 0.7$

k. $\frac{50}{100} \bigcirc 5.00$

l. $3.7 \bigcirc 3\frac{17}{100}$

m. $2.07 \bigcirc 2 \text{ Ones, } 7 \text{ Tenths}$

n. $\frac{9}{10} \bigcirc 0.89$

Unit (10) Assessment

[1] Choose the correct answer:

- a. The value of the digit 3 in the number 15.23 is _____
 A. 0.03 B. 0.30 C. 3 D. 30
- b. $0.07 =$ _____ "as a fraction."
 A. $\frac{7}{10}$ B. $\frac{7}{100}$ C. $\frac{70}{10}$ D. $\frac{70}{100}$
- c. 1.52 ☐ 1.6
 A. $>$ B. $<$ C. $=$
- d. $7 + 0.1 + 0.05 =$ _____
 A. 71.5 B. 7.15 C. 7.51 D. 1.75
- e. Which fraction is equivalent to 0.9 ?
 A. $\frac{90}{10}$ B. $\frac{9}{100}$ C. $\frac{9}{10}$ D. 90
- f. $\frac{35}{100} + \frac{2}{10} <$ _____
 A. $\frac{7}{10}$ B. $\frac{55}{100}$ C. $\frac{3}{10}$ D. $\frac{49}{100}$
- g. The digit in the tenths place in the number 56.79 is _____
 A. 5 B. 6 C. 7 D. 9

[2] Complete:

- a. $\frac{5}{10} + \frac{25}{100} =$ _____ b. 3.16 in word form is _____
- c. $5.7 =$ _____ tenths
- d. The place value of the digit 3 in the number 54.32 is _____
- e. Six and eight hundredths = _____ in standard form.
- f. $21.7 =$ _____ hundredths
- g. $1\frac{6}{10} + \frac{24}{100} =$ _____ h. 5 tens and 3 tenths = _____

[3] Choose the correct answer:

a. $0.07 + 0.2 =$ _____

A. 72 tenths

B. 27 tenths

C. 72 hundredths

D. 27 hundredths

b. $2\frac{1}{10} + 3\frac{1}{100} =$ _____

A. 5.2

B. 5.12

C. 5.11

D. 5.22

c. $7.2 >$ _____

A. 7.3

B. 7.16

C. 7.20

D. 7.29

d. $\frac{2}{10} + \frac{27}{100} =$ _____

A. $\frac{29}{100}$ B. $\frac{209}{100}$ C. $\frac{47}{100}$ D. $\frac{49}{100}$

e. $0.34 \bigcirc 0.4$

A. $>$ B. $<$ C. $=$

f. $\frac{810}{100} = \frac{\quad}{10}$

A. 8100

B. 810

C. 81

D. 8.1

g. $1\frac{40}{100} =$ _____

A. 140

B. 14

C. 1.4

D. 1.04

[4] Answer the following:

1. Mohamed was training for the race. On Sunday, he ran for $\frac{7}{10}$ km. On Monday, he ran for $\frac{36}{100}$ km. What distance did he run in all?

2. Mostafa and his brother have two sandwiches of the same size. Mostafa ate 0.7 of his sandwich. His brother ate $\frac{25}{100}$ of his sandwiches. Who ate more?

3. Amira bought 1.5 kilograms of tomatoes. Nada bought 1.6 kilograms of tomatoes. Who bought less?

4. Maha wrote 7.03 in word form as seven and 3 tenths
Is Maha right or wrong? If she is wrong correct her mistake.

Unit 11

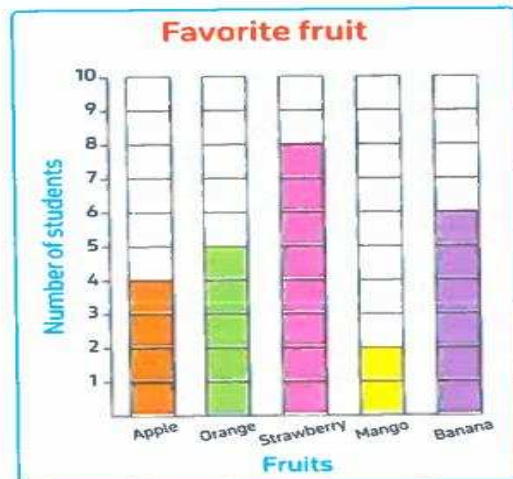
Data with fractions

Lesson 1

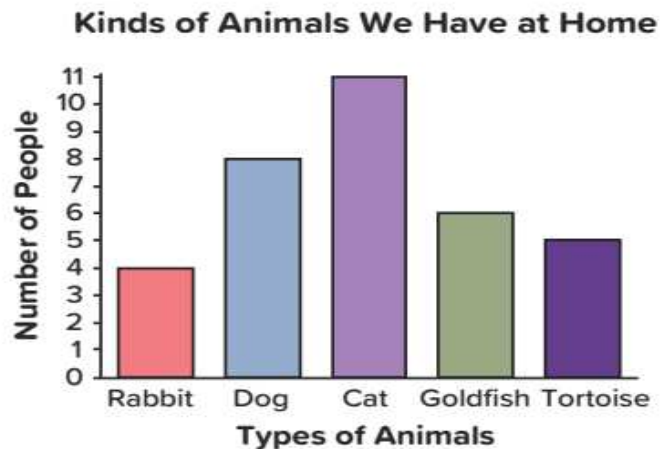
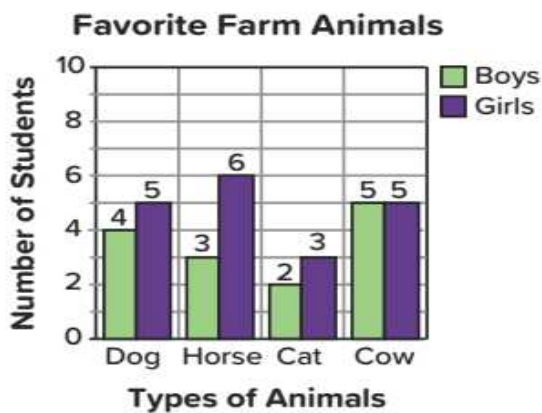
Remember

- You have learned before that data can be represented by more than one way.
- These data about student's favorite fruit.
Sandra represented these data by a bar graph.

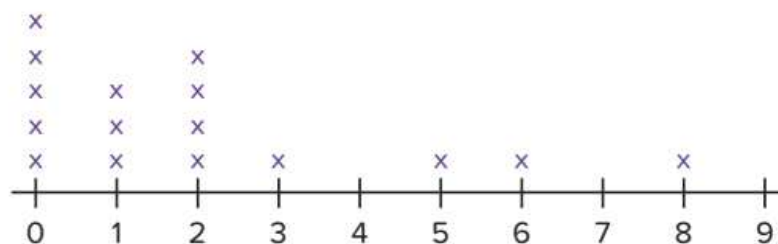
Favorite fruit	
Fruit	Number
Apple	4
Orange	5
Strawberry	8
Mango	2
Banana	6



A bar graph is used to compare data.

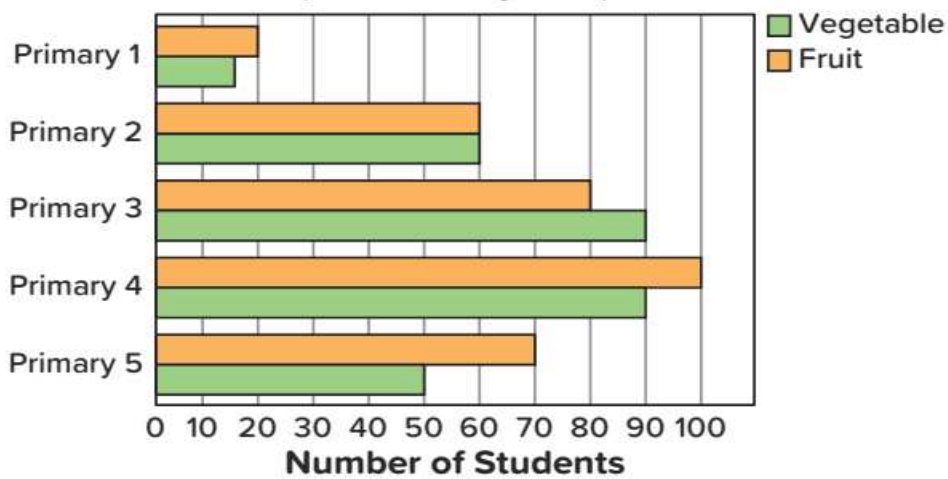


Number of Animals at Home



Key
x = 1 student

Table 4: Fruits or Vegetables
(Choose only one.)



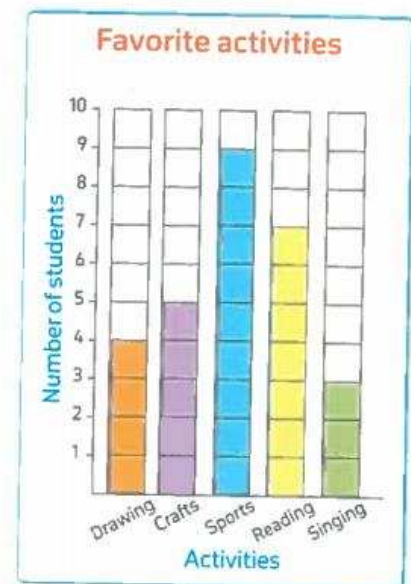
4. Which grade has the same number of students who like fruit and vegetables?

5. Which grade likes vegetables more than fruit?

The following graph shows student's votes for their favorite activities.

Complete the following table. Then answer the questions.

Favorite activities					
Activity	Drawing	Crafts	Sports	Reading	Singing
Number					



- Which activity do most students prefer?
- Which activity was chosen by the fewest students?
- How many students chose reading?
- How many more students chose sports than crafts?
- Which two activities their sum equals the number of students chose sports?

Lesson 2,3

Use the following data to make a line plot, then answer the questions.

a. 11 kg , $12\frac{1}{4}$ kg , $11\frac{3}{4}$ kg , $11\frac{1}{2}$ kg , 12 kg , $11\frac{1}{2}$ kg , $11\frac{1}{4}$ kg , $11\frac{1}{4}$ kg , $11\frac{1}{2}$ kg , 12 kg



1. Give the line plot a title.
2. What is the most common record ?
3. What is the least common record ?

Use the following data to make a line plot.

$6\frac{1}{2}$	7	5	7	7	6	$6\frac{1}{2}$	$7\frac{1}{2}$	$5\frac{1}{2}$	$6\frac{1}{2}$
$5\frac{1}{2}$	6	$6\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{1}{2}$	7	5	6	$6\frac{1}{2}$	$5\frac{1}{2}$



Use the following data to create a line plot then answer the questions

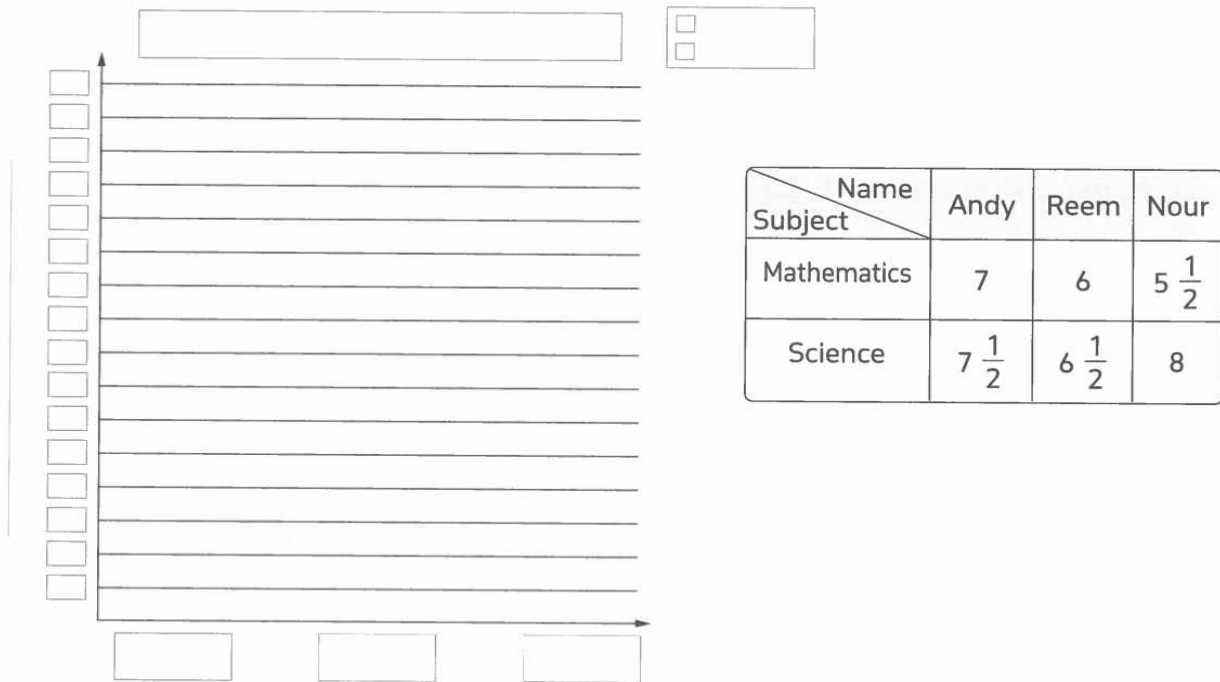
3 m , $3\frac{1}{3}$ m , 4 m , $4\frac{1}{3}$ m , $3\frac{2}{3}$ m , $3\frac{1}{3}$ m , $4\frac{2}{3}$ m , $4\frac{1}{3}$ m
 , 4 m , 3 m , $3\frac{1}{3}$ m , $4\frac{2}{3}$ m.



1. Give the line plot a title.
2. What is the most common record ?
3. What is the least common record ?

The following data shows the marks of three students in Mathematics and Science tests and full mark is 10.

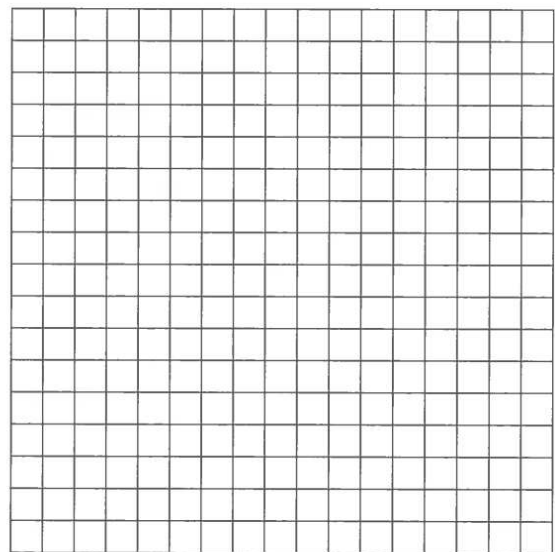
Represent these data using double bar graph.



The following data shows the walking distance in a week by two friends Bassem and Amal. The data are given in kilometers. Represent these data by a double bar graph showing the week's data. Then use the graph to answer the following questions.

Name \ Days	Days				
	Sunday	Monday	Tuesday	Wednesday	Thursday
Bassem	$2\frac{1}{4}$	$1\frac{1}{2}$	$3\frac{3}{4}$	3	$3\frac{1}{2}$
Amal	$1\frac{3}{4}$	$1\frac{1}{2}$	$2\frac{1}{2}$	$3\frac{1}{4}$	4

- Which day Bassem walked the longest distance ?
- Which day Amal walked the shortest distance ?
- On which day did Bassem and Amal's total distance equals 4 kilometers ?
- How many total kilometers did Amal walk in all ?
- How many total kilometers did Bassem walk in all ?
- On which day did Bassem walk twice as far as he did in Monday ?



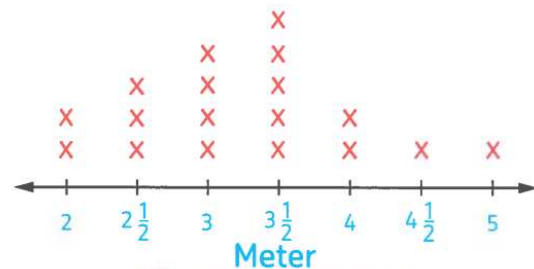
Unit (11) Assessment

[1] Choose the correct answer:

- a. Which of the following can be represented by a line plot ?
 A. Our favorite sports. B. Our favorite colors.
 C. Our weights. D. Our favorite food.
- b. Which of the following can be represented by a double bar graph ?
 A. Favorite animal. B. Marks of friends in Math.
 C. Marks of friends in Math and Arabic. D. Our heights.
- c. To represent the number of walking hours for Ahmed and Hassan in one week you can use _____
 A. line plot. B. pictograph. C. double bar graph. D. bar graph.
- d. Maged collected some data about the favorite pet of his friends. Which kind of representing data is the best ?
 A. Line plot. B. Double bar graph. C. Bar graph.

- e. The opposite line plot represents the lengths of some trees by meter. Which length represents the greatest number of tree ?

- A. $2\frac{1}{2}$ B. 3
 C. $3\frac{1}{2}$ D. 4



key Each x = 1 tree

- f. Which type of graph is suitable to represent these data ?

Name	Ahmed	Nora	Sally	Ola
Age	13	17	15	10

- A. Double bar graph. B. Line plot.
 C. Bar graph.

- g. Which type of graph is suitable for these data ?

Subject	Math	English	Arabic	Science	Art
Hany	20	19	15	18	17
Mona	17	20	19	20	15

- A. Double bar graph. B. Line plot. C. Bar graph.

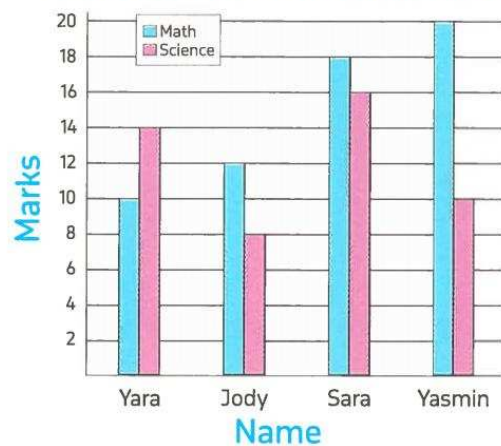
[2] Complete:

- The opposite graph shows the marks of four students in Math and Science tests.

Complete from (a) to (d).

- The student who got the highest mark in Math is _____
- The difference between the Math mark and Science mark of Yasmin is _____
- The student who got the lowest mark in Science is _____
- The total marks of Math and Science of Sara is _____

Marks of Math and Science tests



- The opposite table represent the favorite color of some students.

Complete from (e) to (h).

- The most favorite color is _____
- The total number of students is _____
- The number of students who liked red and yellow is _____
- The difference between the number of students who liked green and white is _____

The favorite color

Color	Number
Red	12
Yellow	18
Black	4
White	11
Green	9

[3] Choose the correct answer:

- Which type of graph is suitable to represent these data ?

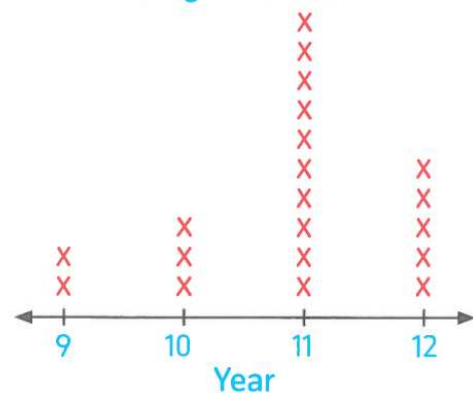
Number of hours	0	1	2	3	4	5
Number of students	2	4	10	11	3	1

- A. Double bar graph. B. Line plot. C. Pictograph.

- In the opposite line plot, if it represents the ages of 40 students in grade 4, then each X stands for _____ student[s].

- A. one B. two
C. three D. four

The age of students



[4] Answer the following:

a. Use the following data to make a line plot.

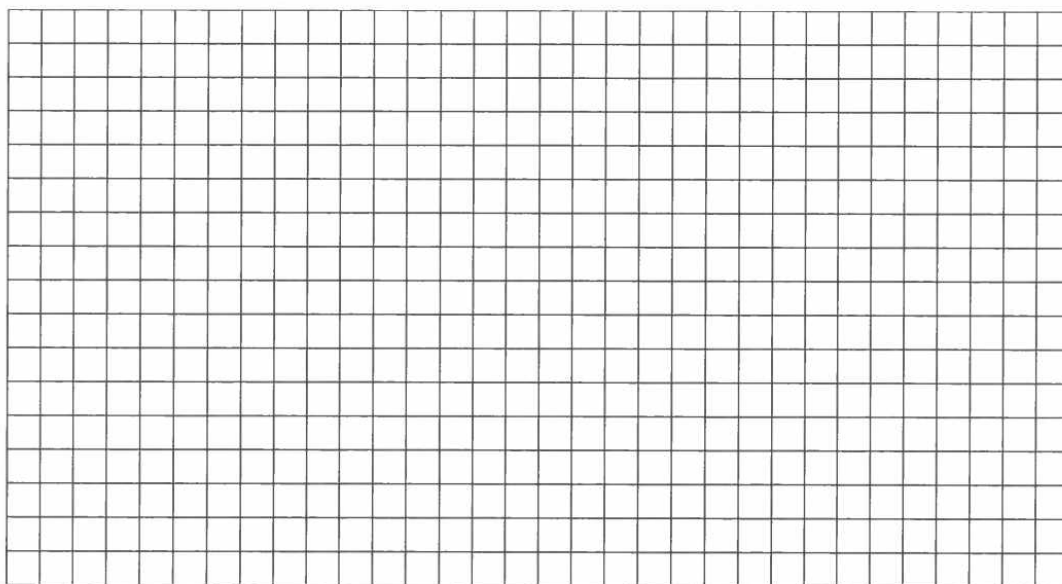
$5\frac{1}{2}$	$3\frac{1}{2}$	$6\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$	$4\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{1}{2}$	$4\frac{1}{2}$	$5\frac{1}{2}$
4	3	5	$5\frac{1}{2}$	$3\frac{1}{2}$	4	6	6	4	5



b. The following data shows the number of study hours in a week by Eslam and Mina.

Represent these data by a double bar graph.

Days Name	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.
Eslam	3	4	$5\frac{1}{2}$	5	3	5	$3\frac{1}{2}$
Mina	$3\frac{1}{2}$	3	5	6	$4\frac{1}{2}$	$6\frac{1}{2}$	2

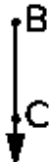
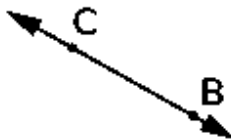
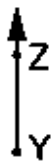
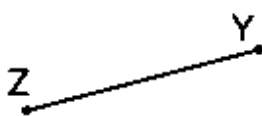
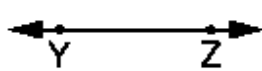
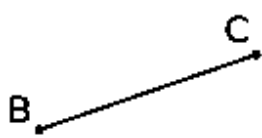


Unit 12

Geometry

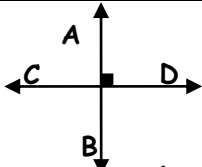
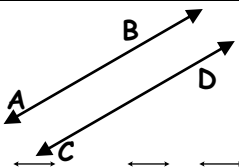
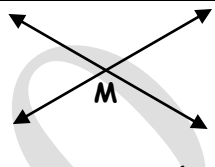
Lesson 1

Matching: Lines, Line Segments, and Rays

	line YZ	$\overrightarrow{YZ}$
	line segment BC	$\overleftrightarrow{BC}$
	line BC	$\overleftrightarrow{YZ}$
	ray BC	$\overline{BC}$
	line segment YZ	$\overleftrightarrow{BC}$
	ray YZ	$\overline{YZ}$

Lesson 2

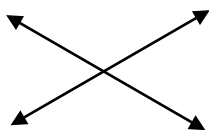
The relation between two Lines:

Perpendicular Lines (Orthogonal lines)	Parallel Lines	Intersecting Lines
 1. Intersect at 1 point. 2. Make 4 right angles. 3. $\overline{AB} \perp \overline{CD}$ or $\overline{CD} \perp \overline{AB}$.	 1. $\overline{AB} \parallel \overline{CD}$ or $\overline{CD} \parallel \overline{AB}$. 2. Intersect at 0 points 3. Never intersecting.	 1. Intersect at 1 point. 2. M is the intersection point 3. Make 4 angles: 2 acute, 2 obtuse.
		

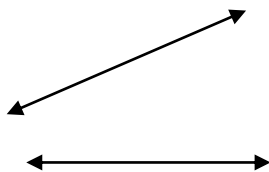
Complete:

- (1) Any two lines that never intersect are called
- (2) Any two lines that intersect at a point and make four right angles are called
- (3) The two intersecting lines intersect at point (s).
- (4) The two parallel lines intersect at point (s).
- (5) The two parallel lines make angles.
- (6) Two lines, if one angle at the intersection point of them is right, then the two lines are called
- (7) Two lines, if one angle at the intersection point of them is acute, then the two lines are called

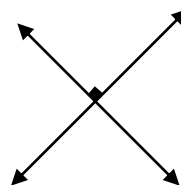
Write (parallel, perpendicular or intersecting) to describe each two straight lines:



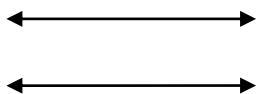
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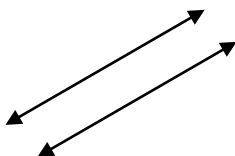
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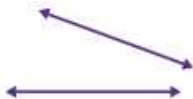
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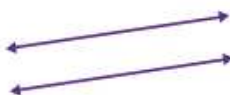
.....

Intersecting or Not? Look at the pairs of lines and rays in the pictures below. For each picture, extend the lines or rays see if the line segments are intersecting or parallel. Hint: Rays can only extend in one direction.

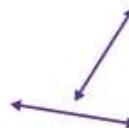
1.



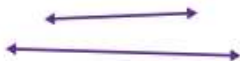
2.



3.



4.



5.



6.



Draw a line to match the name to the picture. Some pictures do not have a match. Label pictures that do not have a match (for example, line segment ST or TS).

$\overleftrightarrow{LM}$
LM

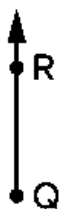
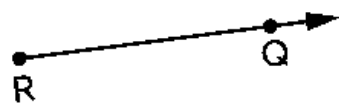
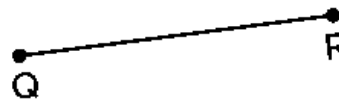
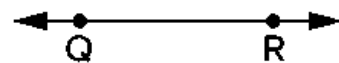
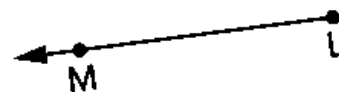
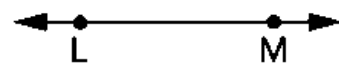
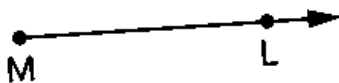
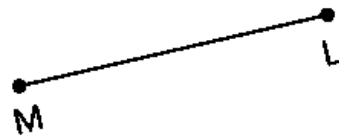
$\overrightarrow{LM}$
LM

$\overline{LM}$
LM

$\overrightarrow{QR}$
QR

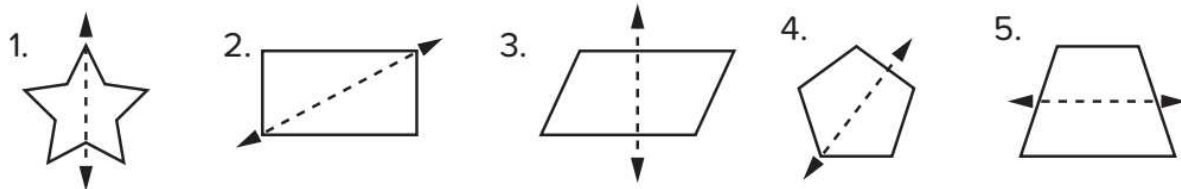
$\overleftrightarrow{QR}$
QR

$\overline{QR}$
QR

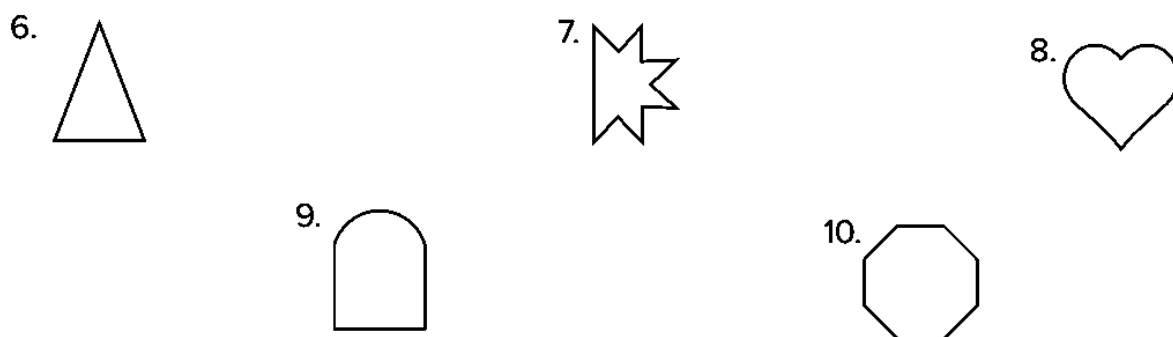


Lesson 3,4

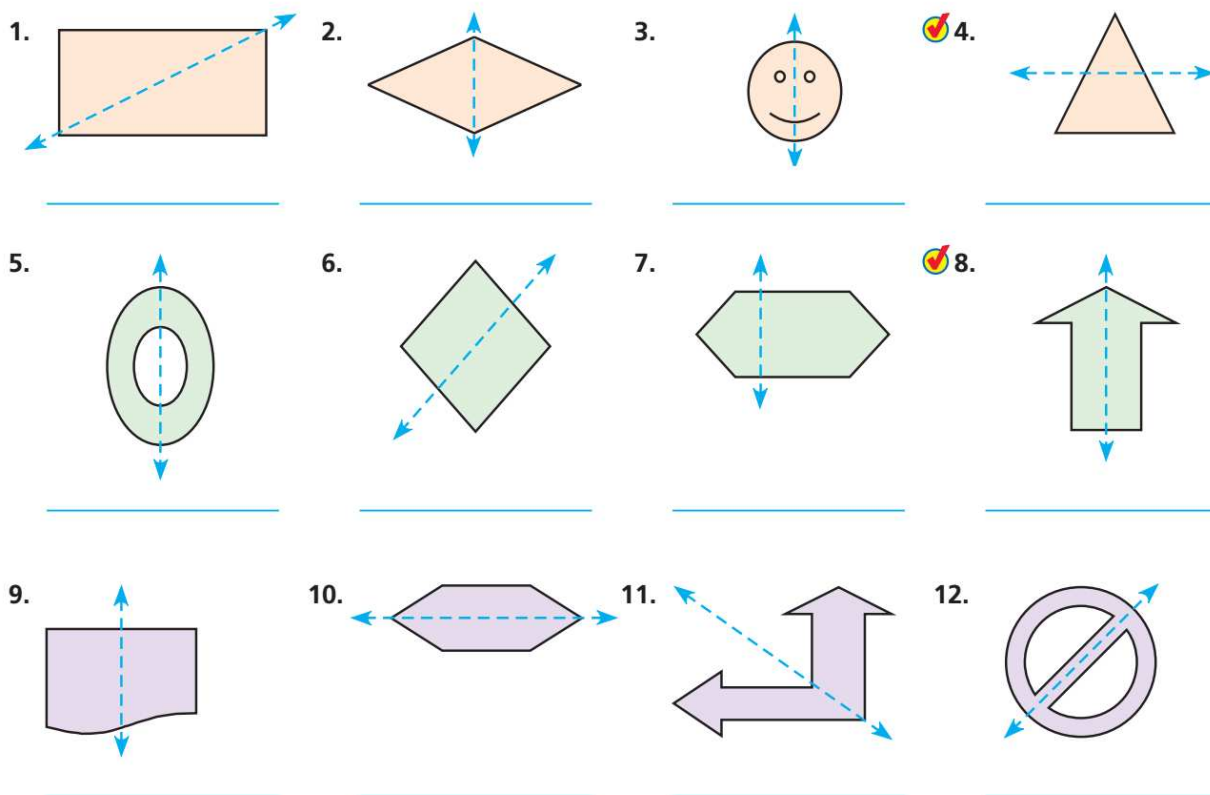
Lines of Symmetry For Problems 1–5, look at each shape. Determine if the line drawn is a line of symmetry. Circle the shapes that show a line of symmetry.



For Problems 6–10, look at each shape. Draw one line of symmetry for each one. (Hint: One shape has more than one line of symmetry.)



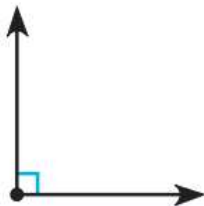
Tell whether the parts on each side of the line match. Is the line a line of symmetry? Write *yes* or *no*.



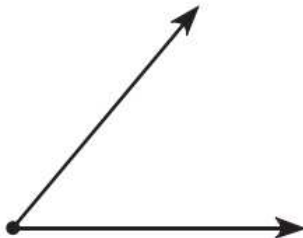
Lesson 5,6

Classifying Angles:

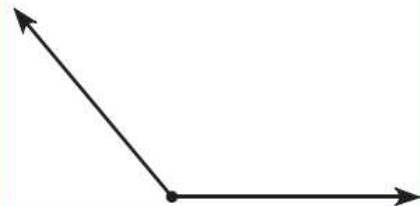
A **right angle** forms a square corner.



An **acute angle** is less than a right angle.

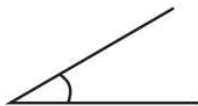


An **obtuse angle** is greater than a right angle and less than a straight angle.



Comparing Angles Look at the angles. Write whether each angle is larger than, smaller than, or equal to a right angle.

1.



2.



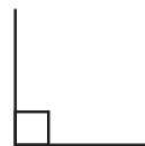
3.



4.



5.

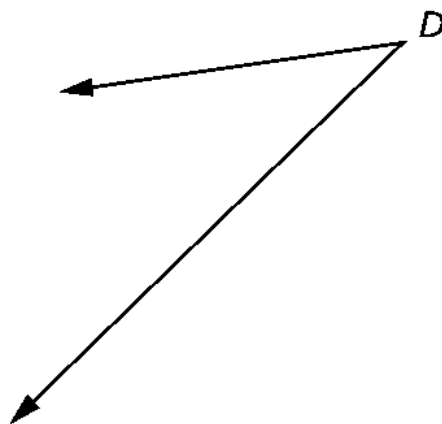


6.

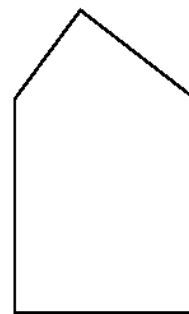
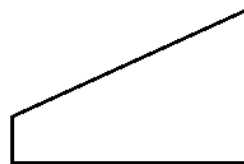
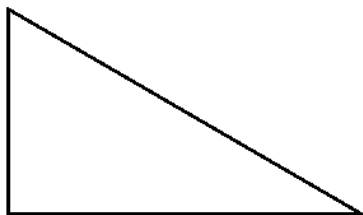
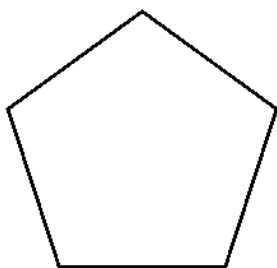


What type of angle is angle D?

- A. acute
- B. right
- C. obtuse
- D. straight



Circle the shapes that contain acute angles.



Use Figure F for 10–15.

10. Name a ray.

11. Name an obtuse angle.

12. Name a line.

13. Name a line segment.

14. Name a right angle.

15. Name an acute angle.

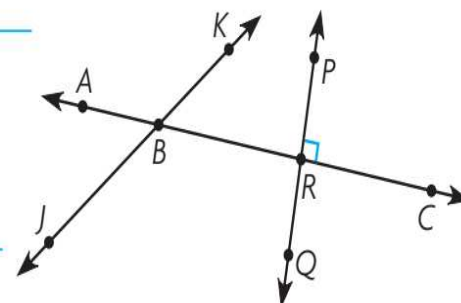
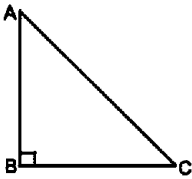
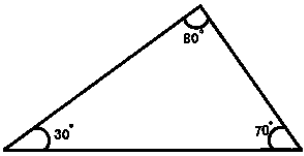
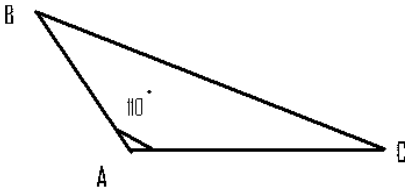


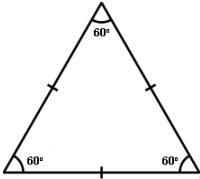
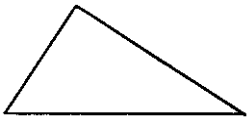
Figure F

Lesson 7,8

Identifying the type of the triangle according to the measures of its angles

Right-angled triangle	Acute-angled triangle	Obtuse-angled triangle
		
It has only one right angle and two acute angles.	It has three acute angles.	It has only one obtuse angle and two acute angles.

Identifying the type of the triangle according to the length of its sides

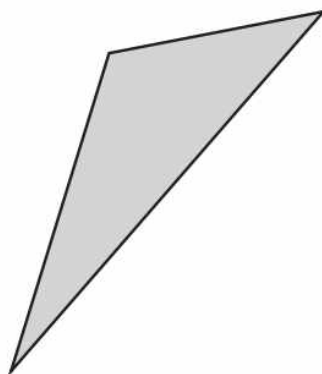
Equilateral triangle	Isosceles triangle	Scalene triangle
		
The three sides are equal in length.	Two sides only are equal in length.	The three sides are different in length.

Note: The sum of the measures of the interior angles of any triangle = 180° .

Remarks

- (1) Any triangle has at least two acute angles.
- (2) We can't find two right angles in one triangle.
- (3) We can't find two obtuse angles in one triangle.

What type of triangle is shown?

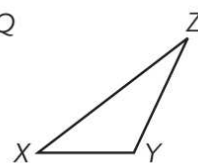
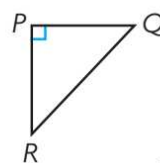
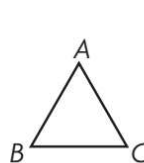


- A. Right triangle
- B. Acute triangle
- C. Obtuse triangle
- D. Equiangular triangle

a. Name the triangle with one right angle. _____

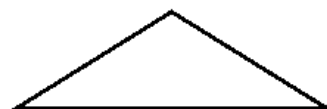
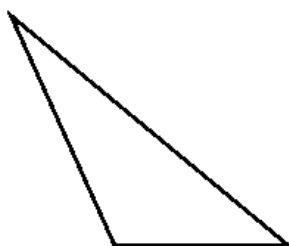
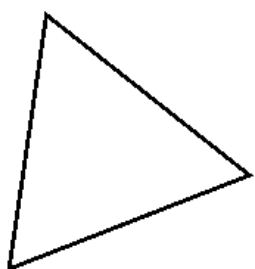
b. Name the triangle with one obtuse angle. _____

c. Name the triangle with three acute angles. _____

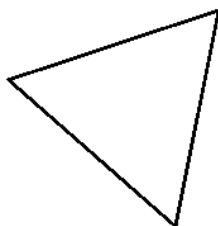


1. True or false: An isosceles triangle only has two sides that are the same length.

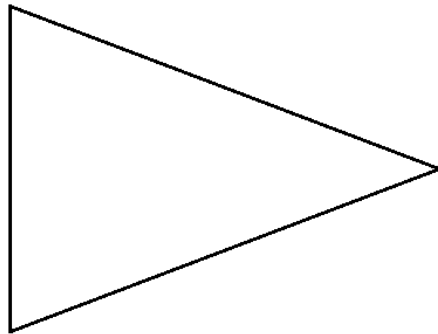
2. Circle the scalene triangle.



3. Is this an equilateral triangle? Why or why not?

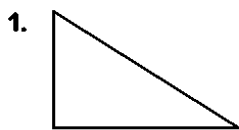


What type of triangle is shown?

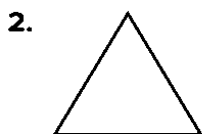


- A. equilateral
- B. isosceles
- C. right
- D. scalene

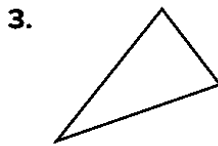
Match each triangle with its name.



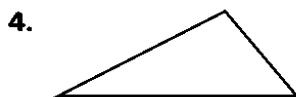
a. isosceles triangle



b. equilateral triangle



c. scalene triangle



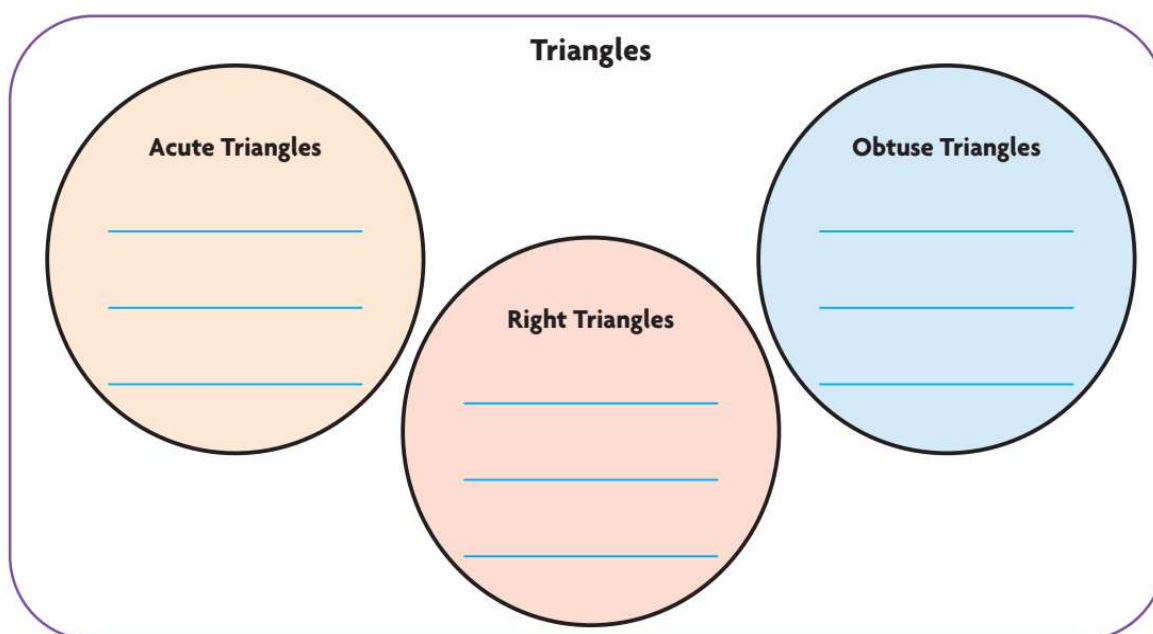
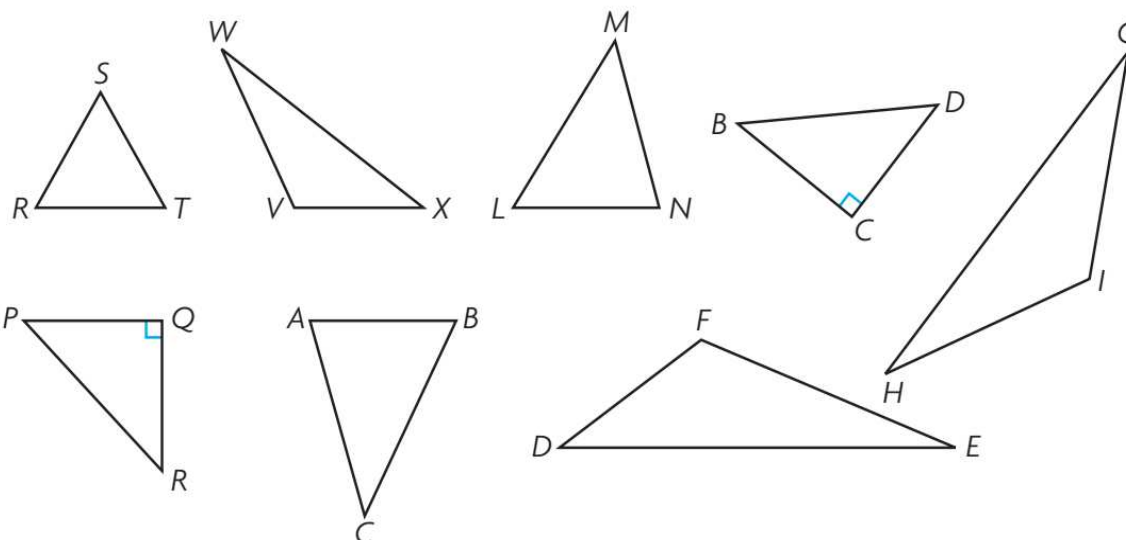
d. right triangle

Complete:

- a. The.....triangle has no equal sides.
- b. The triangle has two equal sides is called.....triangle.
- c. The triangle that its sides are 5cm , 5cm , 5cm is named.....
- d. In the equilateral triangle , there are three sides are.....in length.
- e. Any triangle has at leastacute angles.
- f. The type of any equilateral triangle according to the its angles is.....

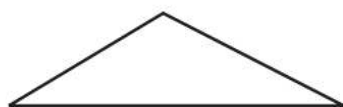
Use a Venn diagram to classify triangles.

Write the names of the triangles in the Venn diagram.

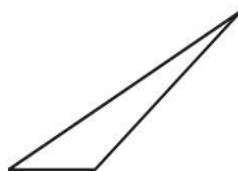


Classify each triangle. Write *acute*, *right*, or *obtuse*.

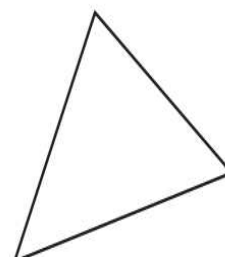
2.



3.

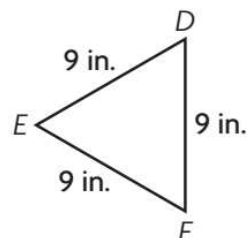
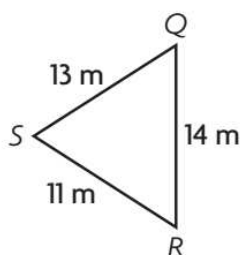
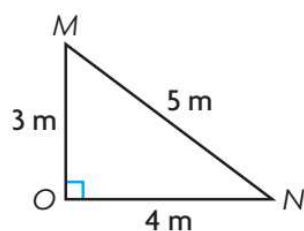
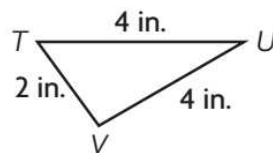
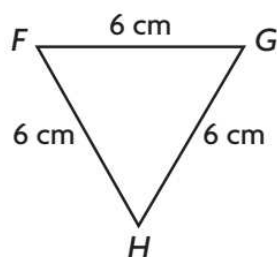
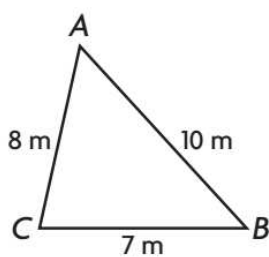


4.



Use a Venn diagram to classify triangles.

Write the names of the triangles in the Venn diagram



Triangles

Equilateral Triangles

Isosceles Triangles

Scalene Triangles

Classify each triangle. Write *acute*, *right*, or *obtuse*.

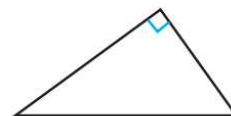
5.



6.



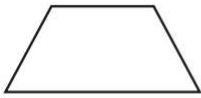
7.



Lesson 9

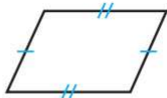
Classifying Quadrilaterals

Common Quadrilaterals



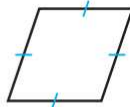
Trapezoid

- 1 pair of parallel sides



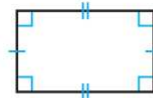
Parallelogram

- 2 pairs of parallel sides
- 2 pairs of sides of equal length



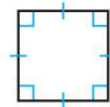
Rhombus

- 2 pairs of parallel sides
- 4 sides of equal length



Rectangle

- 2 pairs of parallel sides
- 2 pairs of sides of equal length
- 4 right angles

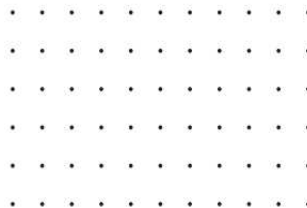
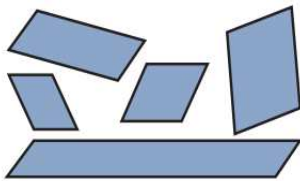


Square

- 2 pairs of parallel sides
- 4 sides of equal length
- 4 right angles

Naming Quadrilaterals Write the name of each quadrilateral. Count how many pairs of parallel sides the shape has and classify the angles. Draw at least one example of each quadrilateral using the dot grid.

1.

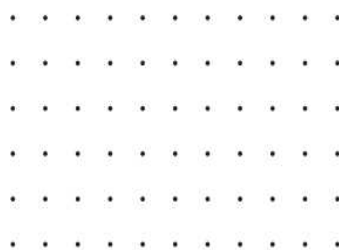
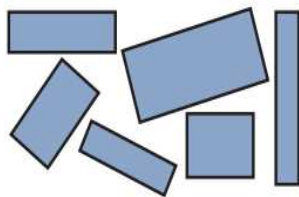


Name: _____

Parallel Sides: _____

Angles: _____

2.

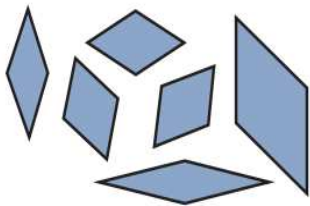


Name: _____

Parallel Sides: _____

Angles: _____

3.

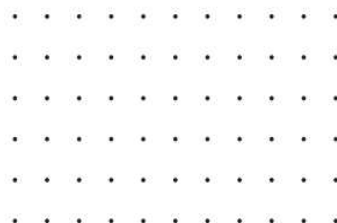
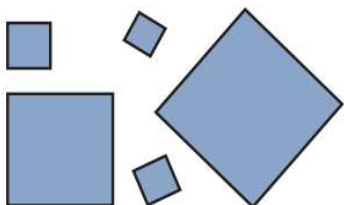


Name: _____

Parallel Sides: _____

Angles: _____

4.

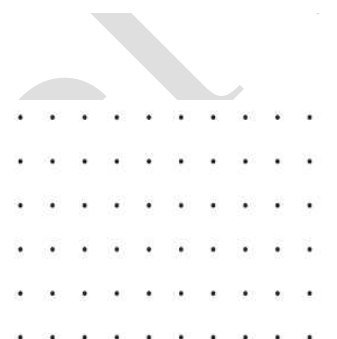
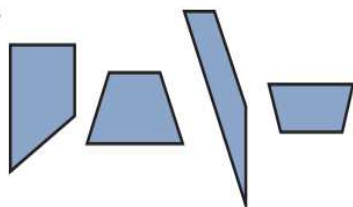


Name: _____

Parallel Sides: _____

Angles: _____

5.



Name: _____

Parallel Sides: _____

Angles: _____

Unit (12) Assessment

[1] Choose the correct answer:

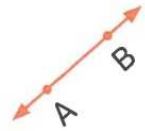
1. The opposite figure is named as _____

A. $\overleftrightarrow{AB}$

B. $\overline{AB}$

C. $\overrightarrow{BA}$

D. $\overleftrightarrow{AB}$



2. A _____ is part of a line. It has two endpoints.

A. point

B. line

C. line segment

D. ray

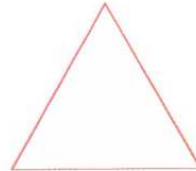
3. The classification of the opposite triangle, is _____

A. isosceles, obtuse

B. isosceles, acute

C. equilateral, acute

D. scalene, acute



4. A _____ is a parallelogram with all sides are the same length.

A. parallelogram

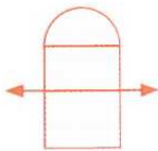
B. rectangle

C. trapezium

D. rhombus

5. Which of the following figures shows a line of symmetry ?

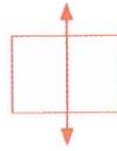
A.



B.



C.



D.



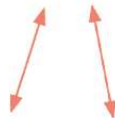
6. The opposite lines show _____

A. parallel lines

C. perpendicular lines

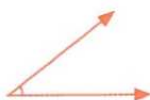
B. intersecting lines

D. not intersecting lines

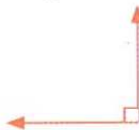


7. Which figure shows a right angle ?

A.



B.



C.



D.



[2] Complete:

1. _____ is named as _____

A B

2. _____ is formed by two rays that have the same endpoint.

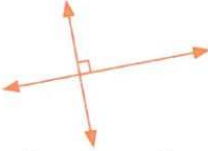
3. The _____ angle is smaller than a right angle.

4. The _____ triangle has only two equal sides.

5. A _____ is a rectangle with all sides are equal in length.

6. The _____ triangle has three equal sides.

[3] Choose the correct answer:

- A _____ has a vary measuring angles with only one pair of parallel sides.
A. parallelogram B. rhombus C. square D. trapezium
- Which of the following figures shows $\overleftrightarrow{CD}$?
A.  B.  C.  D. 
- The equilateral triangle has _____ equal sides.
A. 0 B. 1 C. 2 D. 3
- The opposite two lines are _____
A. parallel B. not intersecting
C. perpendicular D. intersecting and not perpendicular

- The number of the right angles in the opposite figure is _____
A. 1 B. 2 C. 3 D. 4

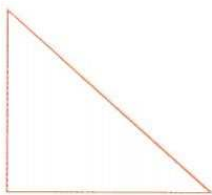
- The number of equal sides in the scalene acute triangle is _____.
A. 0 B. 1 C. 2 D. 3
- A parallelogram has _____
A. 4 equal sides B. 4 right angles
C. 1 pair of parallel sides D. 2 pairs of parallel sides

[4] Answer the following:

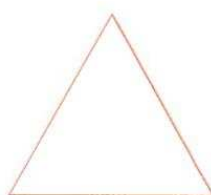
- Hany is making a design using a quadrilateral that has four equal sides and four same-sized angles. What shape is Hany using ? Draw the design.

- Classify the following triangles according to their sides and their angles.

a.



b.

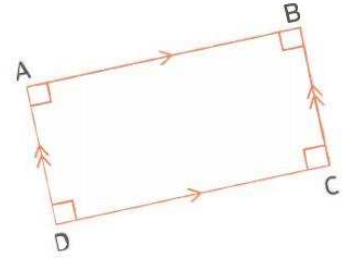


c.



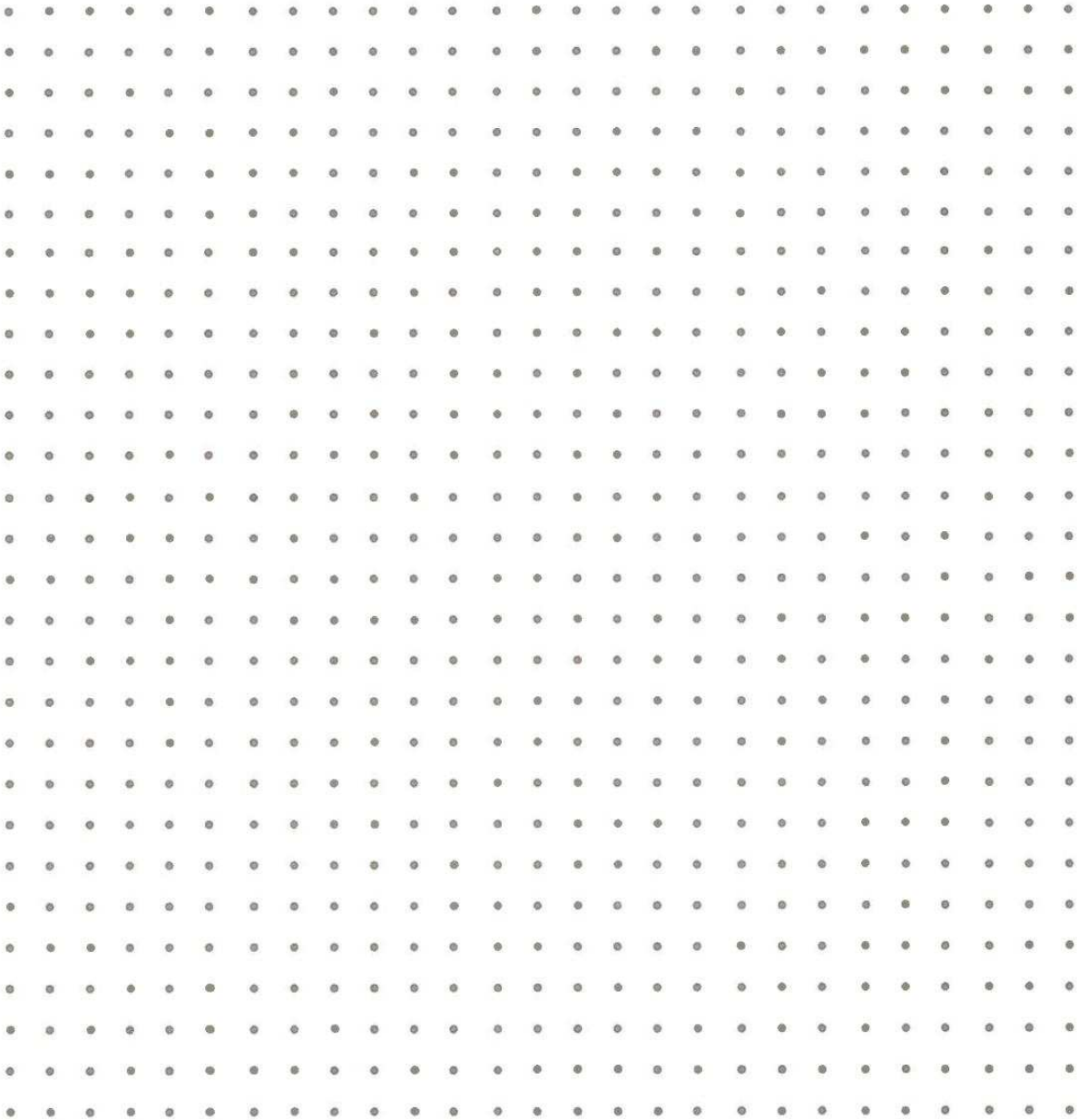
3. In the opposite diagram,
identify :

- a pair of parallel line segments.
- a pair of perpendicular line segments.



4. Use your ruler to connect the dots to draw.

- A right angle
- An acute angle
- A square

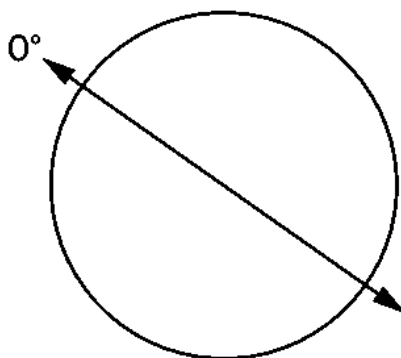


Unit 13

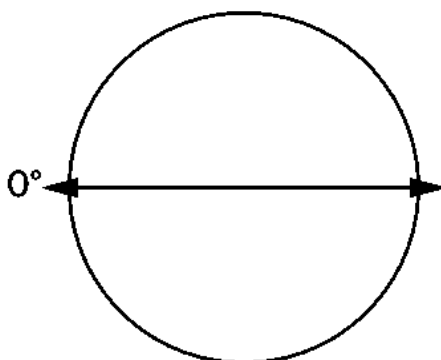
Angles of a circle

Lesson 1

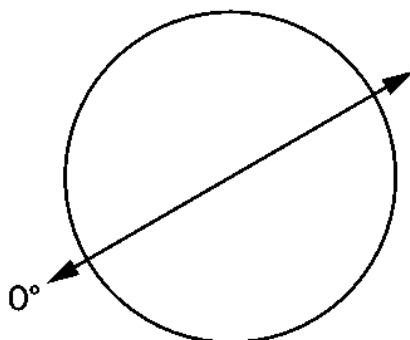
Label 180 degrees. Draw an obtuse angle moving clockwise from 0 degrees. Label the angle.



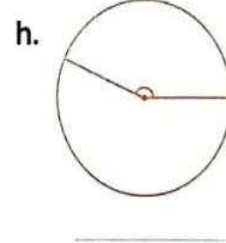
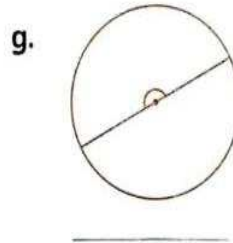
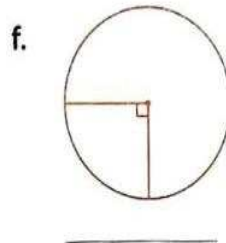
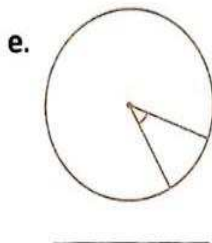
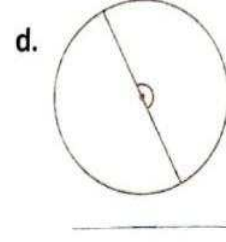
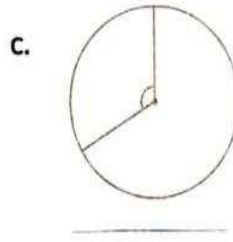
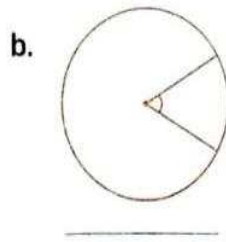
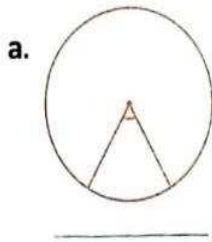
Label 180 degrees. Draw an acute angle moving counterclockwise from 0 degrees. Label the angle.



Label 180 degrees. Draw a right angle moving clockwise from 0 degrees. Label the angle.



1. Classify each angle as acute, right, obtuse or straight.



2. Classify each angle according to its measure.

a. 79° _____

b. 120° _____

c. 90° _____

d. 30° _____

e. 180° _____

f. 89° _____

g. 179° _____

h. 95° _____

i. 60° _____

j. 176° _____

k. 130° _____

l. 27° _____

3. Complete.

a. An acute angle measures between _____ $^\circ$ and _____ $^\circ$

b. An obtuse angle measures between _____ $^\circ$ and _____ $^\circ$

c. The measure of acute angle is less than _____ $^\circ$

d. The measure of right angle = _____ $^\circ$

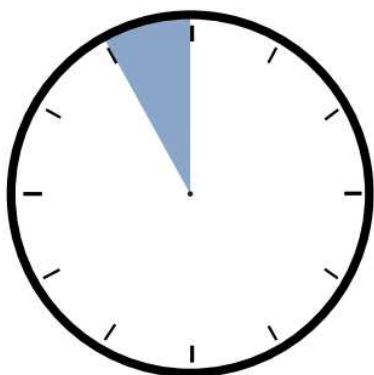
e. The measure of the straight angle = _____ $^\circ$

f. _____ measures between 0° and 90°

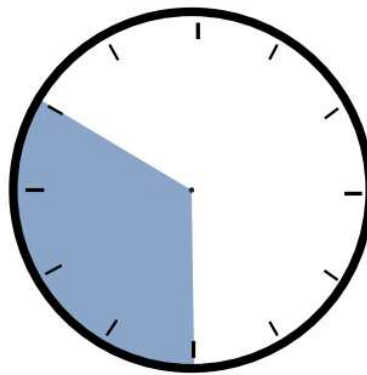
Lesson 2

Fractions and Angles on a Clock Write the fraction of the clock shaded and how many degrees of the clock that fraction represents.

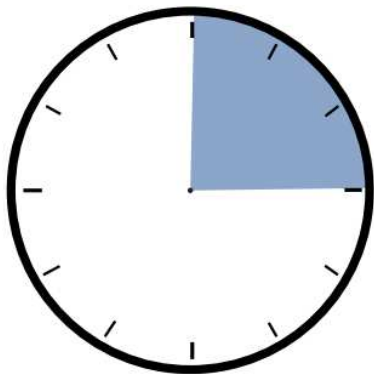
1.



2.

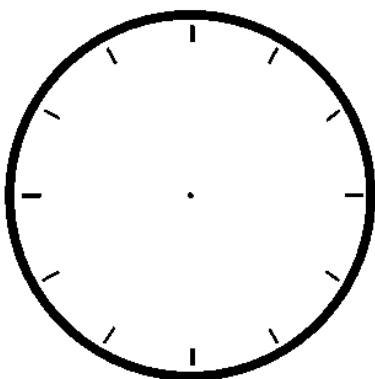


3.

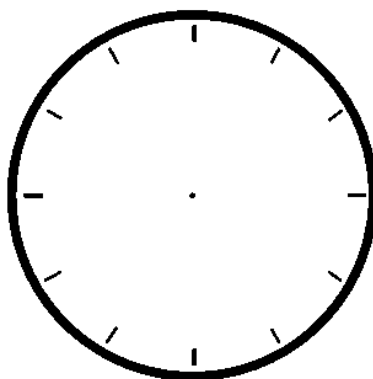


Use the blank clock faces and what you know about benchmark angles to write the missing angle measurements.

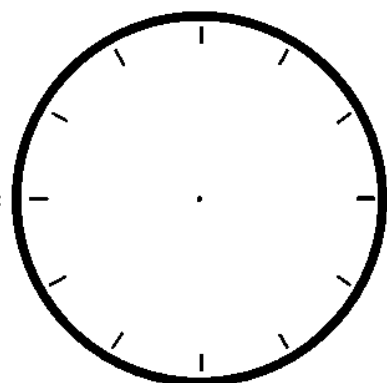
4. $\frac{2}{12} =$



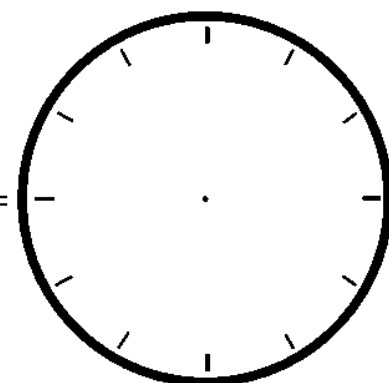
5. $\frac{3}{4} =$



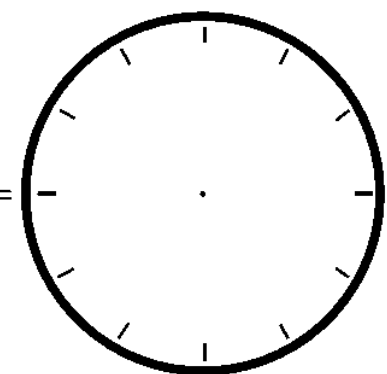
6. $\frac{2}{3} =$



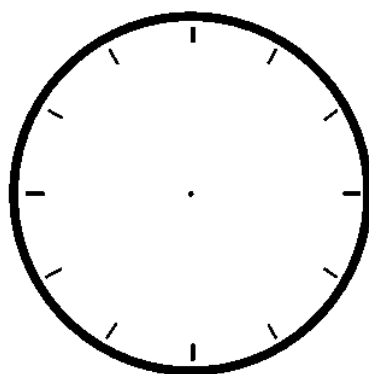
7. $\frac{6}{12} =$



8. $\frac{5}{12} =$



9. $\frac{11}{12} =$



Lesson 3,4

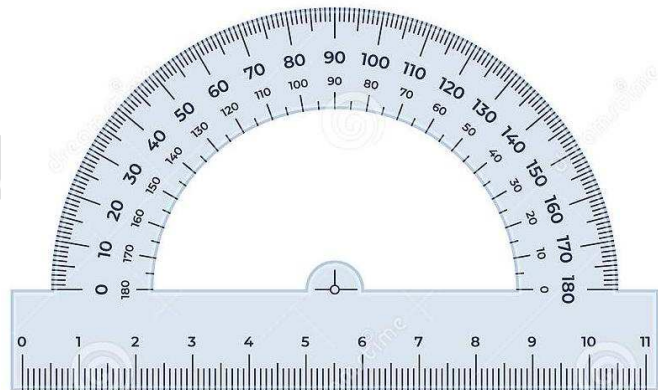
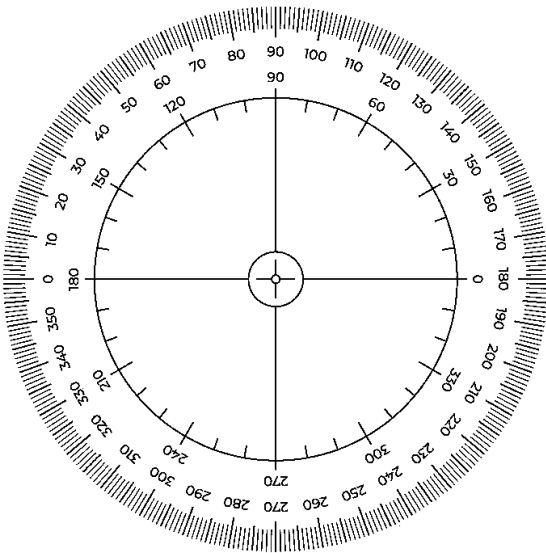
Degrees

Essential Question How are degrees related to fractional parts of a circle?

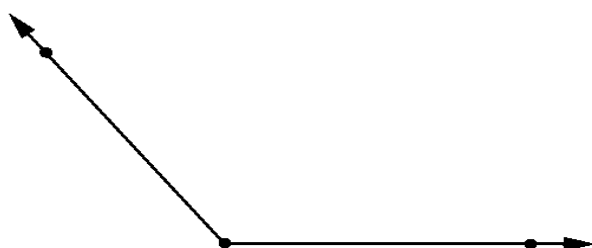
CONNECT You can use what you know about angles and fractional parts of a circle to understand angle measurement. Angles are measured in units called **degrees**. Think of a circle divided into 360 equal parts. An angle that turns through $\frac{1}{360}$ of the circle measures 1 degree.

Math Idea

The symbol for degrees is $^{\circ}$.



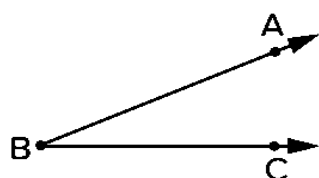
Write three different names for each angle.



Name 1 _____

Name 2 _____

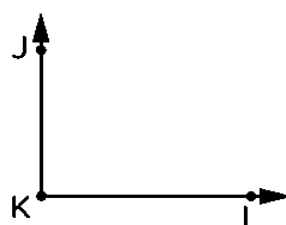
Name 3 _____



Name 1 _____

Name 2 _____

Name 3 _____



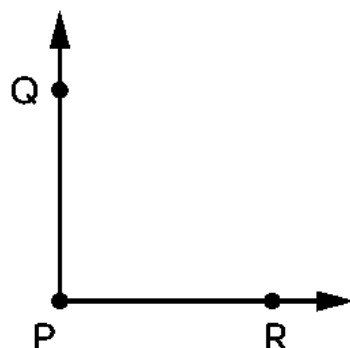
Name 1 _____

Name 2 _____

Name 3 _____

Which *three* choices are acceptable names for the angle shown?

Consider the angle.



A. $\angle PQR$

B. $\angle QPR$

C. $\angle RPQ$

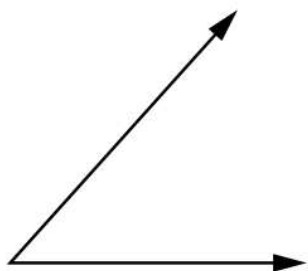
D. $\angle P$

E. $\angle Q$

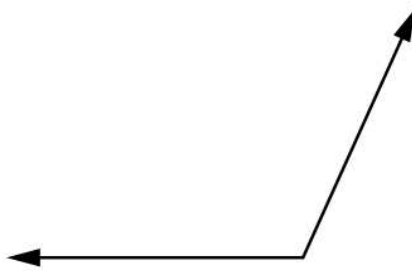
F. $\angle R$

Measurement Practice

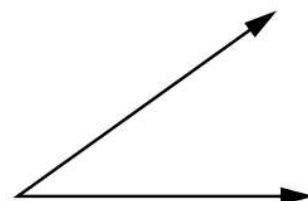
1.



2.



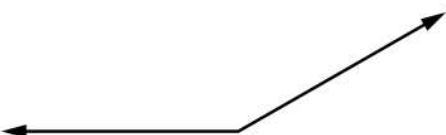
3.



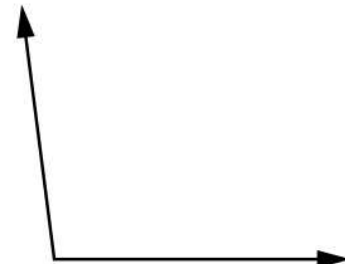
4.



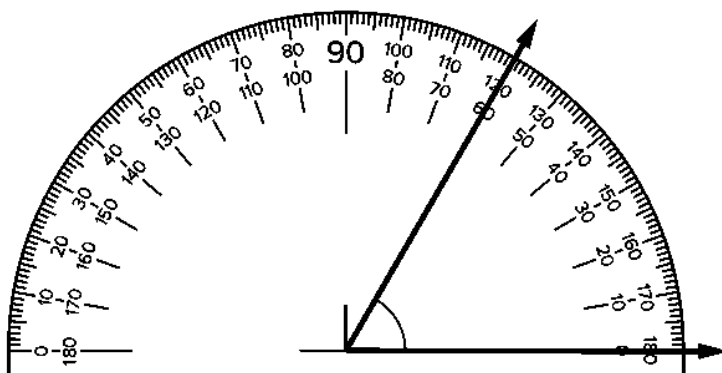
5.



6.



What is the measurement of this angle?



A. 60°

B. 90°

C. 120°

D. 180°

Lesson 5,6

Draw an estimate of the angle.

1. 140°

2. 12°

Use a protractor to draw each angle.

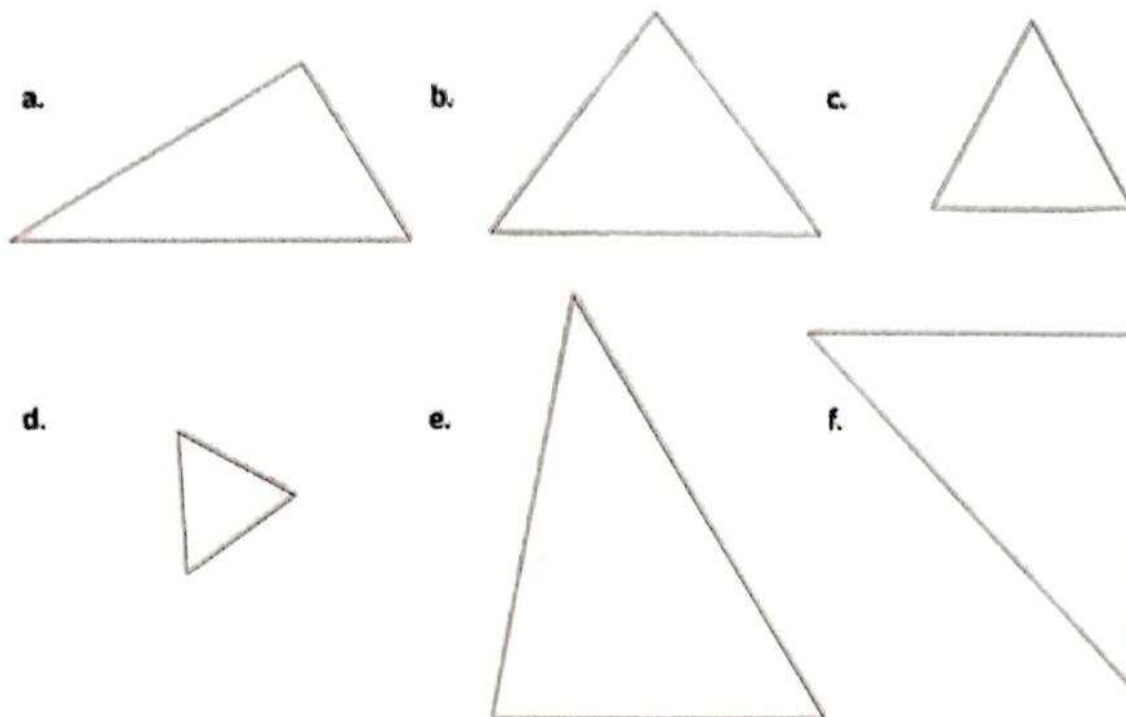
3. 65°

4. 125°

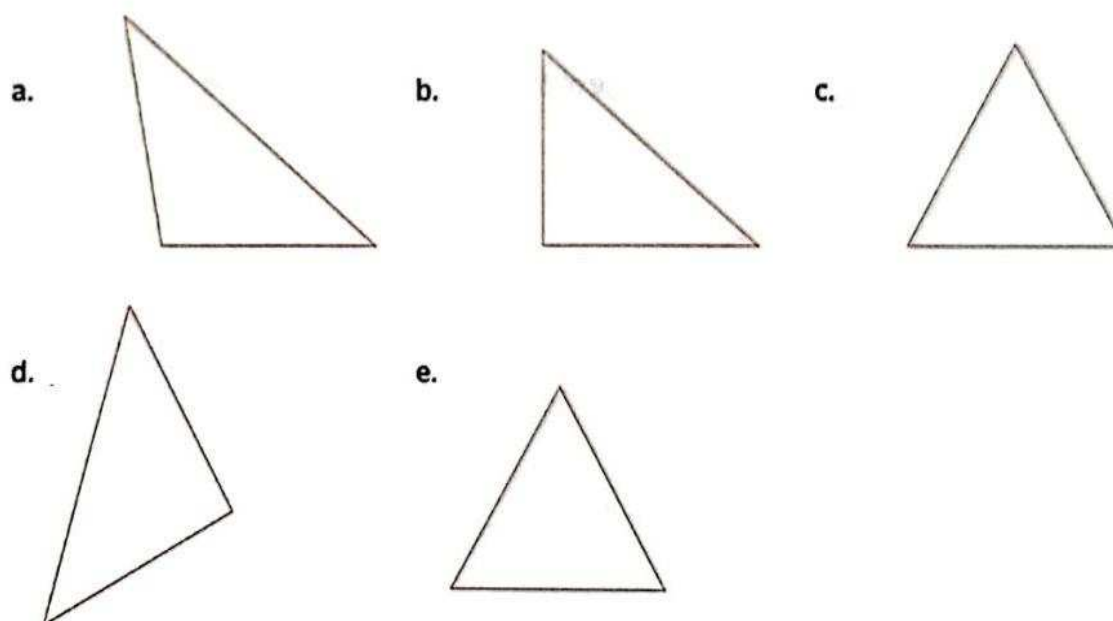
5. 50°

Lesson 7

1. Use a ruler to measure the side lengths of each of the following triangles, then determine the type of each triangle according to its sides.



2. Use a protractor to measure the angles of each of the following triangles, then determine the type of each triangle according to its angles.



Unit (13) Assessment

[1] Choose the correct answer:

1. _____ angle measures 180°

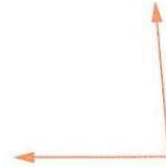
- A. An acute
C. An obtuse

- B. A right
D. A straight

2. The best measure estimation of the opposite angle is _____

- A. 40°
C. 130°

- B. 90°
D. 170°



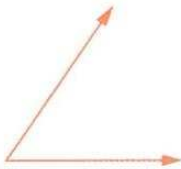
3. How many rotations around a circle is 180° degrees ?

- A. $\frac{1}{4}$ of a full rotation.
C. $\frac{1}{3}$ of a full rotation.

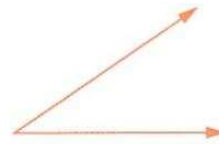
- B. $\frac{1}{2}$ of a full rotation.
D. $\frac{3}{4}$ of a full rotation.

4. Which angle is measured 125° ?

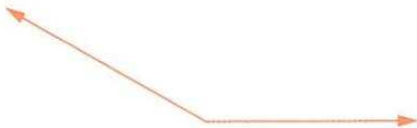
A.



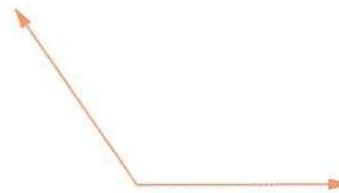
B.



C.



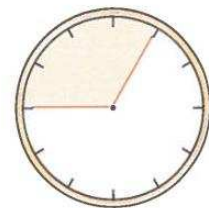
D.



5. The fraction which represents the colored part equals _____

- A. $\frac{1}{3}$
C. $\frac{1}{4}$

- B. $\frac{2}{3}$
D. $\frac{5}{6}$



6. _____ angle measures between 0° and 90° .

A. An acute

B. A right

C. An obtuse

D. A straight

7. The measure of the straight angle is _____ $^\circ$

A. 90

B. 100

C. 150

D. 180

[2] Complete:

1. The two sides of the opposite angle are _____ and _____

2. An obtuse angle measures between _____ and _____

3. $\frac{1}{4}$ of a circle measured _____°

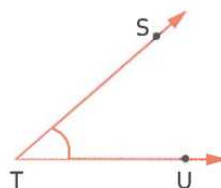
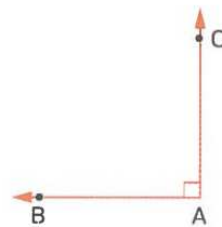
4. The opposite angle named as _____, _____ and _____

5. A _____ is an instrument used to measure and drawing angles.

6. The estimated measure when the hands of the clock shows 10:05 is _____

7. A right angle measured _____°.

8. There are _____ degrees in a circle.

**[3] Answer the following:**

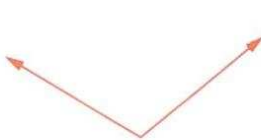
1. Draw $\angle ABC$ with measure of 127° and classify it by its type.

2. Measure each of the following angles, then classify each angle by its type.

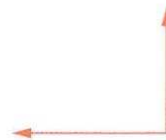
a.



b.

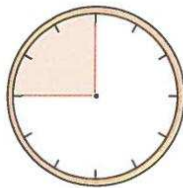


c.

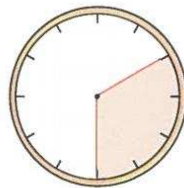


3. Write the measure of the colored angle in degrees in each clock.

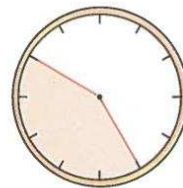
a.



b.

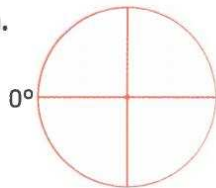


c.



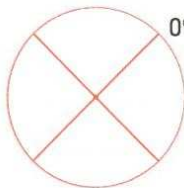
4. Move from 0° in the given direction. Then label 90° , 180° , 270° and 360° on each circle.

a.



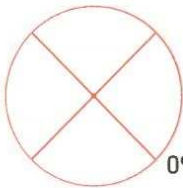
Clockwise

b.



Counterclockwise

c.



Clockwise

[4] Choose the correct answer:

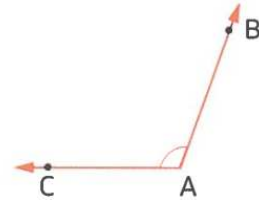
1. The measure of the colored angle of the opposite clock is _____°

- A. 90 B. 120 C. 150 D. 180



2. The opposite angle is named as angle _____

- A. ABC B. BCA
C. CAB D. CBA

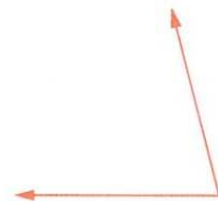


3. The measure of the acute angle is less than 90° and greater than _____°

- A. zero B. 90 C. 180 D. 360

4. The measure of the opposite angle is _____°

- A. 75 B. 105
C. 55 D. 95



5. _____ angle is $\frac{1}{4}$ of the circle.

- A. An acute B. An obtuse C. A right D. A straight

6. The related fraction to the angle of measure 120° is _____

- A. $\frac{1}{6}$ B. $\frac{1}{4}$ C. $\frac{1}{3}$ D. $\frac{1}{2}$

7. The straight angle is the same as _____ right angles.

- A. 1 B. 2 C. 3 D. 4

BEST WISHES

موقع الدكتور محمد رزق التعليمي



امسح الباركود بالموبيل لتثبيت
التطبيق وتحميل كل الملازم مجاناً وبسرعة



حمل التطبيق الآن



كورسات ونتائج امتحانات



ملازم ثانوي



ملازم اعدادي



ملازم ابتدائي



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Dr. Mo. RAZK



D.M.RAZK

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